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the MODERN HOSPITAL

VOLUME 52 MARCH 1939 NUMBER 3

The School

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S. GUMPERT COMPANY, Inc.
Ozone Park, New York City, N. Y.

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Just in Passing—

WITH children play is not only a means of passing time. It is an educational tool of first importance and, if wisely guided, may be a therapeutic force to those who are ill. The nation's leading authority on toys for children and on the place of toys in this concept of play will present next month a guide for hospitals in the selection of toys and play activities for sick children. Ethel Kawin of the University of Chicago, the author, is widely consulted by manufacturers, occupational therapists, and kindergarten and school teachers.

THE New York study of internships and residencies, which appeared a few months ago, has aroused widespread interest among hospitals and medical educators. Dr. Jean A. Curran, secretary of the study committee and author of the report, has prepared a digest of the study for the readers of The MODERN HOSPITAL. You will find it in the April issue.

HOW adequate are the nation's hospital facilities for the care of maternity patients? Disregarding the quality of care for the moment, have we enough beds to give a hospital start to most of the nation's babies? Two workers in the U. S. Children's Bureau have recently sought the statistical answer to these questions. You will be interested in their findings which will appear in our columns next month.

ARE you satisfied with the present methods of handling your medical records when they are called into court? Are the hospital, the medical record librarian, the physician, and the patient all adequately protected against improper disclosure? The administrators of Barnes Hospital, St. Louis, wanted to make sure that their procedure was sound from every point of view. So they and their law-

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yers made a careful survey of all the applicable legal provisions. The results of this study are to be presented next month by Dr. F. R. Bradley, assistant administrator.

DAILY reports to the administrator may be merely a waste of time. If intelligently conceived and executed, however, they give him a quick and accurate method of taking the hospital's pulse. Harold A. Grimm of the Millard Fillmore Hospital, Buffalo, N. Y., recently studied the matter of daily reports to ascertain which were desirable and which were unnecessary. He will tell his conclusions next month.

WE HAVE said before and we have no hesitancy in saying again that one of the unnecessary annoyances often associated with hospital life is the early awakening of patients. Grant Hospital, Chicago, is one of many hospitals that has abolished this system. Next month Alice L. Price, R.N., will discuss the actual administration of the new plan.

WHAT is the future of the voluntary hospital? That question has been giving real concern to David H. MacAlpin Pyle, president of the United Hospital Fund of New York. Next month he will present his conclusions and his suggestions for improving the service and community relationships of the voluntary hospital so as to safeguard its future.

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In Its 45 Operating Rooms, in 10 Delivery Rooms, 27 Scrub-up Rooms and in Many Other Departments, Charity Hospital of Louisiana Installs CONQUEROR LINE Stainless Steel Equipment

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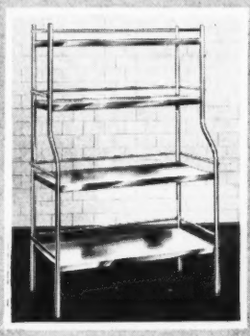
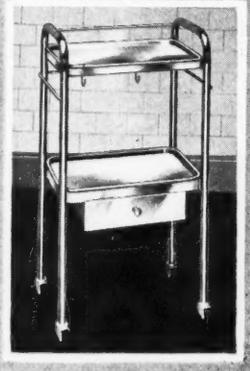


Merrick Model Wall Utensil Stand



Johnston Model Anaesthetist's Table

● THOSE responsible for the construction and the equipment of Charity Hospital (one of the largest general hospitals in the country) have insisted on utilizing the latest and best that modern science has developed for institutions concerned with the public health. So naturally, they have installed CONQUEROR LINE Stainless Steel equipment, realizing that they thus ensured permanency, absolute sanitation, attractive appearance and freedom from repair. "CONQUEROR" embraces a complete line of modern Stainless Steel Hospital equipment. Illustrated are just a few of these Stainless Steel items.

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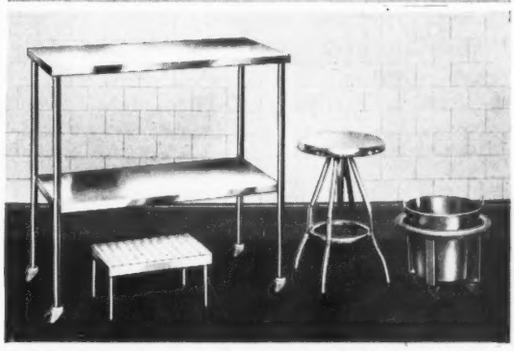
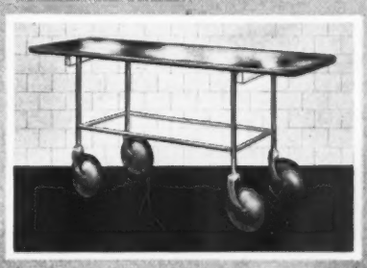


Left to right: *Howard Model Instrument Table, Kent Model Foot Stool, Clifton Model Revolving Stool, Lexington Model Kick Bucket.*



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MANUFACTURERS OF HOSPITAL EQUIPMENT
WEEHAWKEN, N. J.

EST. 1889

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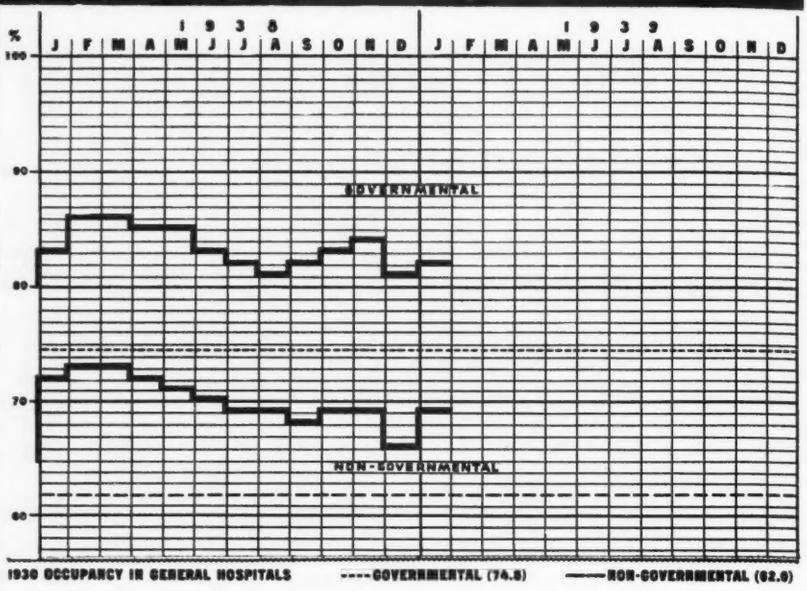
HOSPITAL OCCUPANCY BAROMETER

Type and Place	Census Data on Reporting Hospitals: Hosp.[1]	Beds[2]	1939 1938: Jan.	Dec.	1938 1937: Jan.	Dec.
Government						
New York City	17	10,827	106	94	96	91
New Jersey	4	2,122	80*	80	86	87
Washington, D. C.	1	1,220	70*	70*	65*	65*
N. and S. Carolina	13	1,579	54	65	68	61
New Orleans	2	2,466	98*	97	98	97
San Francisco	3	2,255	90	88	90	88
St. Paul	1	850	72*	72	77	70
Chicago	2	3,619	89	83	85	81
Total[4]	43	24,938	82*	81*	83*	80*
Nongovernment						
New York City[3]	68	15,194	67*	67*	73	68
New Jersey	58	9,772	64*	64	69	65
Washington, D. C.	9	1,818	72*	72*	78	67
N. and S. Carolina	108	7,297	54	59	65	60
New Orleans	7	1,153	75*	64*	69*	61
San Francisco	16	3,178	75	69	74	70
St. Paul	9	1,099	71*	71	75	66
Chicago	12	2,190	58	58	64	60
Cleveland	6	928	82	71	78	71
Total[4]	293	42,629	69*	66*	72*	65

[1]Excluding hospitals for tuberculous and mental patients and institutional hospitals. Census data are for most recent month. [2]Including bassinets, usually. [3]General hospitals only. [4]Occupancy totals are unweighted averages. *Preliminary report. Complete occupancy figures for January 1933 to October 1938 are given on page 798 of The Seventeenth Hospital Yearbook.



Occupancy Rises Sharply in Voluntary Hospitals

Occupancy in the voluntary hospitals took a decided upturn in January, according to figures compiled on the basis of incomplete reports. As further reports come in, they probably will show still further increases. The figure as at the date of writing is lower than the one recorded for a year earlier.

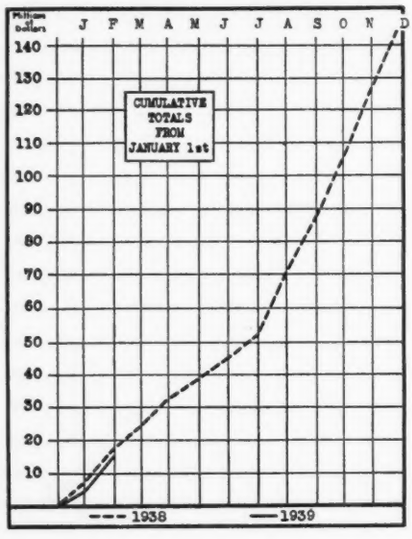
In the governmental general hospitals, also, occupancy took an upturn in January, although the difference was not so great as in the voluntary institutions.

Forty-four hospital construction projects were reported during the period from January 16 to February 13. Of these 42 gave cost estimates that aggregated $10,273,000. There were five new hospitals which are expected to cost $2,875,000. Most of the money, as usual, was in additions to existing hospitals or allied institutions, there being 33 such projects, of which 31 reported costs of $6,818,000. Two alteration jobs were estimated at $269,000 and four new nurses' homes were computed at $311,000.

The total construction for the year to date will cost $15,114,000, a figure slightly lower than the figure for last year.

A tabulation of the hospital construction projects in work as of February 10 enumerated 595. A total of 583 of these reported costs which came to a grand total of $231,200,000. Some of the larger projects, of course, have been in process of construction for many months.

HOSPITAL CONSTRUCTION



Wholesale prices jumped one point upward during February, the index of the *New York Journal of Commerce* dropping from 75.3 on January 23 to 75.0 on January 30 and remaining there until February 18, when it rose to 76.0. Grain prices dropped off during this period from 58.8 to 56.9 and the cost of building materials also made a small drop, going from 97.8 to 97.1. The other indices reported in these columns all advanced. General food prices rose from 66.8 to 69.8; textiles increased from 54.1 to 54.5 and fuel remained almost unchanged, moving from 82.1 to 82.2.

Drugs and fine chemicals rose slightly in price, according to the index of the *Oil, Paint and Drug Reporter.* This index, which is based on prices as of Aug. 1, 1914, went from 182.6 to 183.0 in the period from January 23 to February 20.

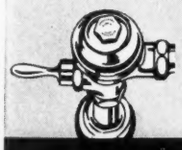
The general index of business activity of the *New York Journal of Commerce* increased from 84.9 to 85.4 in the week from February 4 to 11. One year earlier the same index moved from 69.1 to 68.9. The extent of the recovery during the twelve months is, therefore, substantial and the direction is now upward rather than the reverse. Auto output was down somewhat during the third week in February because of the fact that the Ford company went on a four day week. Other manufacturers maintained regular schedules.

QUIET PLEASE

● There is no more annoying noise than the needless roar of rushing water from a flush valve. Sloan *Quiet-Flush* Valves respect the therapeutic command of "Quiet, Please!" Eliminate the roar from *your* flush valves by installing Sloan *Quiet-Flush*.

Any installation of Sloan Royal, Star, Crown or Naval Flush Valves may be transformed to the new *Quiet-Flush* by merely replacing the present stop valve and the insertion of a new guide and seat in the flush valve itself. This easily accomplished change makes your flush valve absolutely quiet. On new installations the specification of Sloan *Quiet-Flush* should be a matter of course.

Sloan *Quiet-Flush* is unlike any other silencing device. It combines the best features of generally known methods with important contributions from Sloan research. With Sloan *Quiet-Flush* you have the world's finest, most universally used valve—plus absolute quiet . . . For the address of your local Sloan representative consult your telephone directory, or write direct to—



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SLOAN *Quiet Flush* VALVES

WITH THE ROVING REPORTER • • • •

More About Shops

• A few months ago, reference was made to the constantly increasing number of hospital gift shops, coffee shops and tearooms. Only recently, we inspected another, a brand new one, New York City's latest, in fact. You'll find it at St. Luke's. Incidentally, that's something to put in your notebook marked "New York World's Fair"—a trip to St. Luke's to see the new nurses' home, with time out for a special plate lunch or a delicate sandwich at the Hospitality Shop.

Just to give some idea of the size of the shop, it can accommodate 50 hungry customers at tables and at the counter. If you cannot rid your mind of the coffee shop idea, remember this: One stool is worth four chairs.

All sorts of interesting experiments are being tried; a $1 dinner, for example. What a convenience for visitors this will be! The plan is to feature a special tea each day, including sandwich and beverage, for a flat price that will be attractively low. Another thought for the would-be coffee-shopper! Prices must be kept down if patronage is to reach the proper proportions. Also, don't be too stingy with the portions.

At St. Luke's, as at hospital shops elsewhere, it is the food service that produces the profits rather than the sale of gifts. Generally, it runs 2 to 1 in favor of the food. Such projects as a whole, however, offer great possibilities not only in actual service but in financial return, provided they are managed properly.

But more about this later. It's a subject in itself. In the meanwhile, add this to the notebook. Try a hamburger sandwich with onions at the Hospitality Shop next summer. You'll be making no mistake.

Cabinet Preserves Bandages

• Plaster of paris bandages no longer cause trouble because of the failure of the plaster of paris to set properly. A cabinet especially designed to store these bandages at Lenox Hill Hospital, New York, assures a uniform quality, even during humid weather. Let's stop in for a minute and have Dr. Walter I. Galland of the orthopedic service of Dr. Charles H. Jaeger explain the problem and the solution.

"Plaster of paris ($2\ CaSO_4+H_2O$) is made by heating gypsum ($CaSO_4+2H_2O$) and forcing out some of the water of hydration. When this dehydrated powder is mixed with water, the additional water of crystallization is again taken up and the mass solidifies. The rigidity of the material thus formed is due to the presence of interlaced and coherent crystals of the dihydrate.

Cabinet for plaster of paris bandages.

"At such times as the humidity in the atmosphere becomes to the slightest degree excessive, it is possible for the plaster of paris powder to absorb water of crystallization from the humid atmosphere. Such partially crystallized plaster of paris possesses less affinity for added water and, therefore, its potential ability to form a solid homogeneous mass is decidedly impaired. This is the reason that we have our greatest difficulty with plaster of paris during the humid months.

"The cabinet was designed to preserve the plaster of paris bandages in a constantly dry atmosphere until needed for use. It is constructed of sheet metal and has removable shelves, also made of sheet metal. These shelves are perforated in order to permit free circulation of air. At the bottom of the cabinet is a shallow, removable metal tray for holding granular calcium chloride or any other deliquescent material. The door of the cabinet should be equipped with some positive type of lever lock to keep it firmly sealed. It is essential, of course, that the door should be kept closed and locked except when bandages are placed in or removed from the cabinet. It is obviously important that the dry plaster of paris used in making the bandages should be properly stored in airtight drums, lest it be impaired by exposure.

"Since using this type of cabinet, we have been able to maintain a uniform quality of our plaster of paris bandages, even during most unpropitious spells of humid weather."

Watch Your Step!

• Do you know the ten frequent causes of floor accidents in hospitals? Here they are: (1) water on the floor, (2) flower petals on the floor, (3) improper materials used for maintenance and overwaxing, (4) corridor obstructions, (5) running in corridors, (6) types of shoes worn by employes, (7) lack of facilities for inclement weather, (8) improper lighting, (9) elevators not stopped level with the floors and (10) defective floors.

This important information is revealed in a survey made by the Safety Conference of the Greater New York Hospital Association among its member institutions. The greatest number of slips and falls occurs on corridor floors, and the type of maintenance used clearly indicates the cause of these accidents. The report goes on to recommend a nonslip cleanser and a nonslip floor finish for linoleum coverings.

The second greatest number of accidents occurs in the wards and the third greatest, in private rooms. Few accidents occur on laundry floors.

The committee recommends the following procedure for the maintenance of linoleum floor coverings: for sweeping, a cotton wick push-mop that can be kept clean by frequent washing. This will collect the dirt, and dust will not be distributed in the air to resettle on the surface as when one uses a hair brush. The floor should be dressed with a nonslip floor finish which will give a good wearing surface and which will not have to be renewed except at long intervals. When it is felt that the floor should be washed, it will be necessary only to wipe the floor with a damp mop wrung out in cold water and then the floor may be buffed.

Congratulations to William E. P. Collins, chairman of the subcommittee on floor safety and assistant superintendent, Lenox Hill Hospital, and members of the Safety Conference, comprised of Murray Sargent, Leighton Arrowsmith, William B. Seltzer and Joseph F. Hanning! Incidentally, this subcommittee on floor accidents is just one of three appointed to study various types of accidents and make recommendations for their prevention.

LOOKING FORWARD

Modernization Alone

REPLACEMENT and modernization of hospital plants are more important in many communities than increase in capacity. Accustomed to projects directed toward enlargement, some administrators and trustees may doubt the public's response to a program that will effect little or no expansion of capacity.

There is rather conclusive evidence, however, that the public is just as responsive to modernization as to enlargement. The acid test is in public subscription campaigns in which opinion, prejudice and inclination are expressed in specific contributions. Accordingly, the opinions of public relations and fund-raising counsel are pertinent.

A leader in this field recently cites instances in which public response to modernization programs has been wholly satisfactory. We quote a few paragraphs that convey his opinion.

"Replacement projects, if correctly and thoroughly described, will be accepted by the public as just as urgent as programs for expansion. The explanation is slightly more technical and may take longer, but the conclusion—that you can't practice modern medicine with model T equipment—is as impelling as the conclusion that the hospital needs more capacity.

"Furthermore, the supercritical person is relieved to discern that the hospital's program will not also expand its operating deficit, as such people interpret the project. Thus, one important point of resistance is removed when you emphasize that patient capacity will not be increased, or will be increased only slightly.

"To the experienced administrator, this assumption is without real significance, since operating deficits are not determined by mere size so much as by ratios of paying to part-paying or nonpaying patients. But community chest directors—administrators as well as board members—harbor this misconception with extraordinary frequency. And so do wealthy persons.

"In certain cases, expansion will tend to reduce operating deficits by increasing the percentage of private accommodations. Modernization, even through wholesale replacement, will often reduce operating deficits by increasing patronage and by reducing maintenance and personnel costs. The solution of the basic difficulty of many a hospital lies in that direction, even in instances in which the community is relatively self-contained and in which there is no obvious substantial 'competition' with more modern hospitals.

"Our experience demonstrates that the public approves modernization and replacement. It approves with dollars, not mere acquiescence, the forward moving hospital that is not content to serve its patients in terms of hard beds, cold food or makeshift wards adapted from sun porches. The public applauds the substitution of modern, clean, acoustically treated and even air conditioned buildings for the moldering firetraps in which certain of our community hospitals are now trying to match the miracles of science described in syndicated columns in daily newspapers.

"Other factors being equal, there is a greater prospect of success for a replacement project than for a program of expansion, although this does not deny that many a project including expansion is justified."

Noiseless Construction

THE use by hospitals of oxyacetylene welding for fabrication and repair of equipment is an interesting recent development. Even more interesting from the standpoint of patient comfort, however, is the use of welding in construction. Most hospital construction today consists of additions to existing hospitals rather than entirely new institutions. Hence it often happens that patients will be housed within earshot of the construction operations. How much better for their peace of mind if the steel framework of the new addition or nurses' home appears to glide noiselessly into the sky instead of being put together to the constant hammering of rivets.

Welding has been accepted in New York City and Chicago and is being approved by other city building departments as a satisfactory substitute for riveting. When construction of buildings other than hospitals is contemplated on land neighboring an institution, a request that welding be substituted for riveting would doubtless be received with sympathy if made early in the planning operations and before actual contracts were let. The cost to the owner would not exceed the cost of riveting and might be less.

Demand for Hospital Institutes

THE attendance of 87 hospital people at the recent Minnesota institute for hospital administrators, sponsored jointly by the University of Minnesota, the state hospital association and the American College of Hospital Administrators, gave a clear answer to those persons who had feared that the extension of this institute would impair its popularity. Although the institute was lengthened from three days to six and the registration fee was raised from $5 to $15, attendance increased 50 per cent over any previous institute. In addition to lengthening the period, the course was enriched by visits to local hospitals, extensive round tables and the presence on the program of national leaders in the field of hospital administration.

Hospital groups in other parts of the country may learn from the Minnesota experience, as well as from that in California last summer, that there is a definite demand for well planned regional institutes held in metropolitan areas under the auspices of outstanding universities. A reasonable registration fee and a longer period of intensive study will not deter hospital administrators anxious for further educational benefits and for the opportunity to keep professionally fit.

Service Department

IN A beautiful booklet, illustrated with photographs portraying the various activities of the Holy Cross Hospital of Chicago, the Sisters of Saint Casimir, who operate the institution, pay fitting tribute to what they term the "service department." In this booklet there is a page of pictures showing a painter wielding his brush, a furnace man at his work, an elevator operator at his post, a laundress at an ironing board and an elderly scrubwoman with her mop.

These persons, as well as others not mentioned, perform essential services in every hospital in the land. No hospital can possibly get along without them. If a hospital had to choose between having a garbage handler, a social worker, a record librarian or a roentgenologist, it would of necessity have to choose the garbage handler.

Of all the personnel, however, those who perform the more menial tasks in the hospital usually receive the lowest wages, work the longest hours and eat the poorest food. They have the shortest vacations and the least security of employment. They never get to go to conventions, nor do they have time off for committee meetings or their Christmas shopping. They punch the clock. Because hospitals are exempt from the provisions of the Social Security Act, many persons who would be eligible for old age benefits were they employed by commercial or industrial concerns face poverty or pauperism as they reach the age when they are no longer employable. Yet among them in every hospital are some of the most loyal and dependable of all the family of those who serve the sick.

When next we compliment a hospital superintendent on the cleanliness and orderliness of the house, let's ask that a moiety of our praise be passed on to those the product of whose toil evoked it.

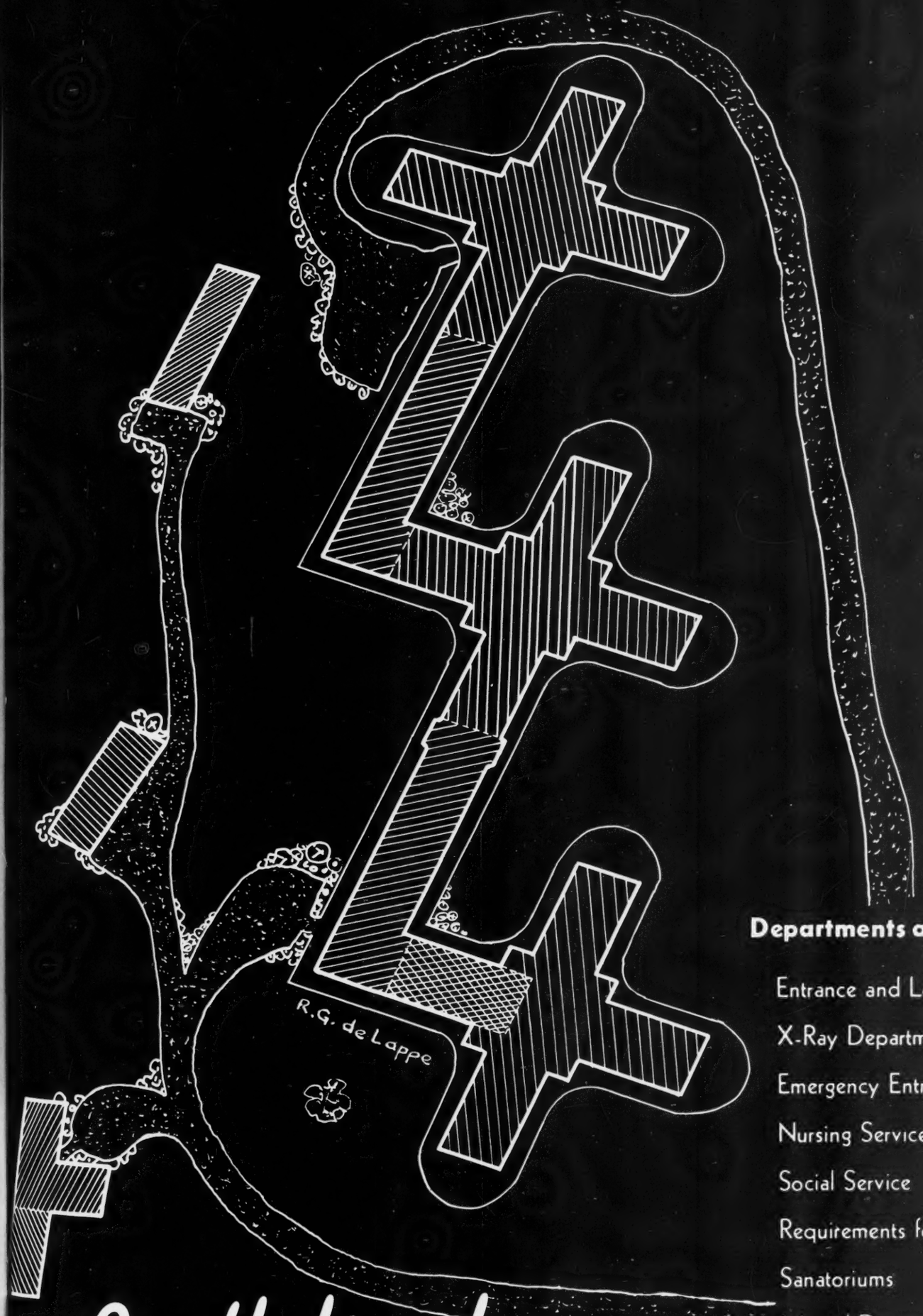
Mental Health and Public Dollars

LESS than 6 per cent of the total amount of money that the American people spend each year for health services of all types is spent for the diagnosis and treatment of mental disease. Furthermore, of the $200,000,000 spent for mental illness, only $20,000,000 is spent for the diagnosis and treatment of mental illness in patients' homes and doctors' offices.

Some striking facts were revealed in a symposium on mental health at the recent winter meeting of the American Association for the Advancement of Science. A summary of the medical economic aspects of the symposium was presented by C. Rufus Rorem, director of the committee on hospital service of the American Hospital Association.

Trenchant criticisms of present methods of dealing with mental disease were voiced by Doctor Rorem. Most important is the lack of preventive work. Next is the inadequate use of social service. Third is the unwillingness or inability of general hospitals to make provision for adequate psychiatric service in spite of the estimates that nearly one-half of so-called physical illnesses requiring hospital care are caused or are accompanied by psychic or emotional factors. Fourth is the enormous waste involved in giving low cost and low grade custodial care to thousands of patients who will rarely recover with such care when intensive psychiatric treatment might reclaim many of them. (Doctor Rorem points to a western state in which the psychiatric hospital spends $6 per patient day and the state hospital for mental disease spends only about $1; yet, owing to the more effective treatment in the former, its costs per case are $180 while in the latter the average case costs $2000.) Fifth is the need for deeper exploration of the possibilities of home care of those with mental disease. Sixth, and last, is the discrimination against mental disease by agencies concerned with relief.

"Health insurance plans," Doctor Rorem states, "even those under voluntary auspices, may well include services for mental disease. Such inclusions would often avoid the necessity of expensive services to be financed by the insured or by the general population." He points out, however, that there is no indication that costs of hospitalization can ever be borne by the families of mentally ill persons, although early diagnosis would reduce unemployability. If such persons cannot be treated outside of institutions, responsibility for their care will remain on government hands.



Departments and Types

Entrance and Lobby

X-Ray Department

Emergency Entrance

Nursing Service

Social Service

Requirements for Asepsis

Sanatoriums

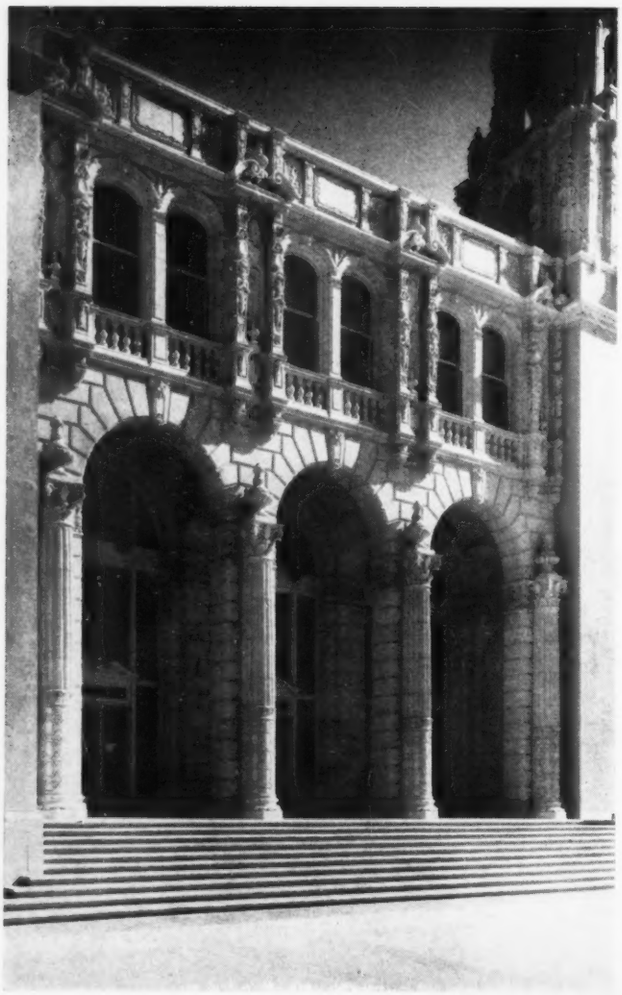
Mental Disease Hospitals

Portfolio of HOSPITAL PLANNING

MAIN ENTRANCE AND LOBBY

Best Foot Forward

BENJAMIN W. BLACK, M.D., and WILL G. CORLETT



The imposing entrance to a large county hospital. This, the Alameda County Hospital, is the main institution of four run by that county. It is for acute cases.

The entrances and approach to Palo Alto Hospital, a community institution consisting chiefly of private and semiprivate accommodations and small wards.

AN IMPORTANT element of good will is attained if early impressions are favorable. A patient's or visitor's first impression of a hospital is usually obtained from the entrance and the lobby. The unhappiness incident to sickness and tragedy may, in a measure, be overcome if the hospital entrance is pleasing and the lobby is gracious and cheerful.

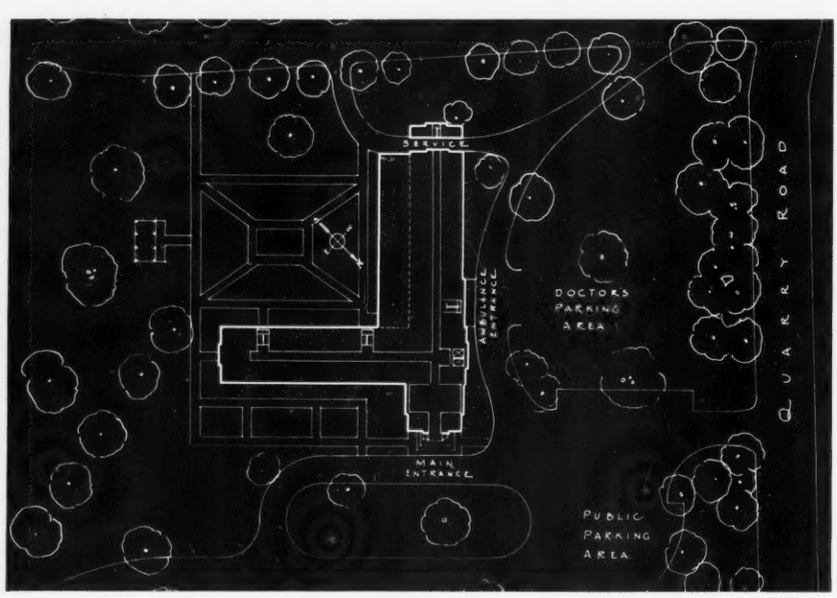
In addition to its use by incoming visitors and their friends and relatives, the entrance and the lobby are used by persons who wish to transact business with the hospital management. Offices must be arranged so that they are easily accessible for this purpose.

The planning requirements for hospital entrances, therefore, must be based on these two important functions and their coordination.

Since the function of an entrance is distinctly a service function, it is a mistake to sacrifice service space in order to increase the number of patients' beds. This is particularly true in the case of a hospital that expects later to expand its accommodations. Enlargement of lobby space is generally more difficult than extension of accommodations for patients. Apparently trivial details in the planning of the entrance area are not really trivial; they require the most careful attention on the part of architect and administrator.

Usually it is true that the type and character of an institution may be judged by the entrance and the exterior of the building. For a hospital a sense of sufficiency, even of sumptuousness, is desirable but at no sacrifice of utility. Sometimes former patients will boast about their illness and will point out to their friends the place where they were treated.

The entrance will vary according to its location, the terrain, the size



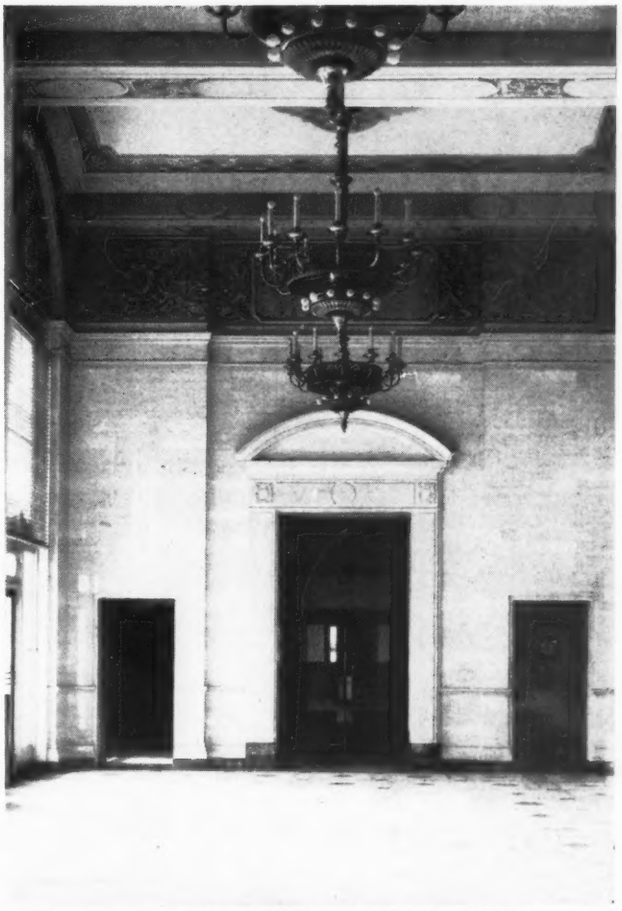
Doctor Black is medical director, Alameda County Institutions, Oakland, Calif., and Mr. Corlett is a hospital architect of Oakland.

and the type of construction and of materials used. The approach should be easy of access to both vehicular and pedestrian traffic. Routine service and traffic not actually concerned with administration should not be routed to the main entrance.

Among the accompanying illustrations is shown the imposing entrance to a large county hospital, an institution built upon a hill with an imposing view from two directions. Gates at the bottom of the hill add to the dignity of the approach. Such an entrance is appropriate for a large public building and is most desirable for this hospital which has an actual and potential capacity of 900 patients. This public building was designed with the idea that the people have a right to be prideful of their public buildings. The hospital is largely built of concrete, gracefully decorated with designs of an ornate character, all of which demands an imposing entrance, gracefully and artistically treated.

Beyond the three arches with hanging lamps are large doors which open into a spacious lobby. The

Part of the spacious lobby of the Alameda County Hospital, where as many as 1500 persons may be handled in a day. Adjacent offices are well planned.

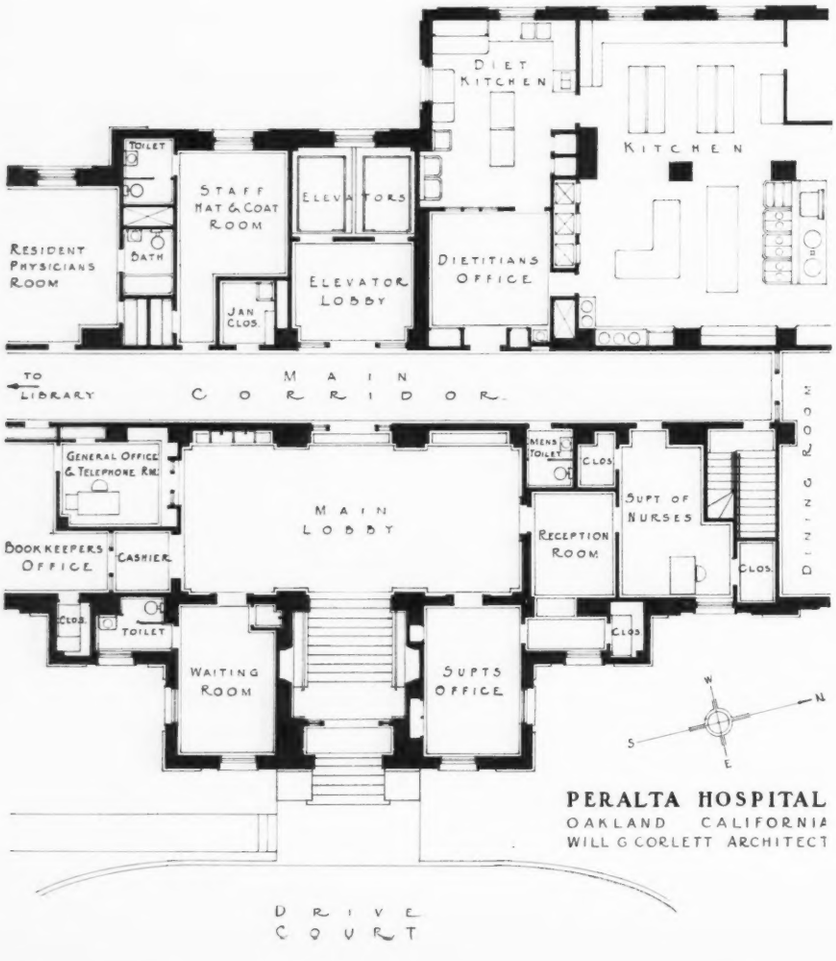


Section of lobby showing information desk at Palo Alto Hospital. Decorations and furnishings are indicative of its size and clientele.

floor and walls of the lobby are of synthetic marble. As many as 1500 persons in one day may be handled, checked, directed to their proper place or allowed to transact their business from this point. Under such circumstances, size becomes of importance and only by the proper arrangement of the adjacent offices can such large numbers be handled.

In larger hospitals elimination of unnecessary traffic and possible reduction in the size of the lobby may be brought about by the use of other entrances for out-patients, staff, services, supplies and for the ambulance. In small hospitals a different type of treatment may be required, particularly for private institutions in which parents, relatives and other visitors must often use the lobby as a waiting room. When a lobby is used for this purpose, it should be as quiet and restful as possible. It is a disadvantage to use a lobby as a waiting room, when large numbers of persons must be handled and when a patient must be admitted from a point in the lobby. Patients are often embarrassed by having their first contact with the institution and the necessary preliminaries to an admission take place before an audience.

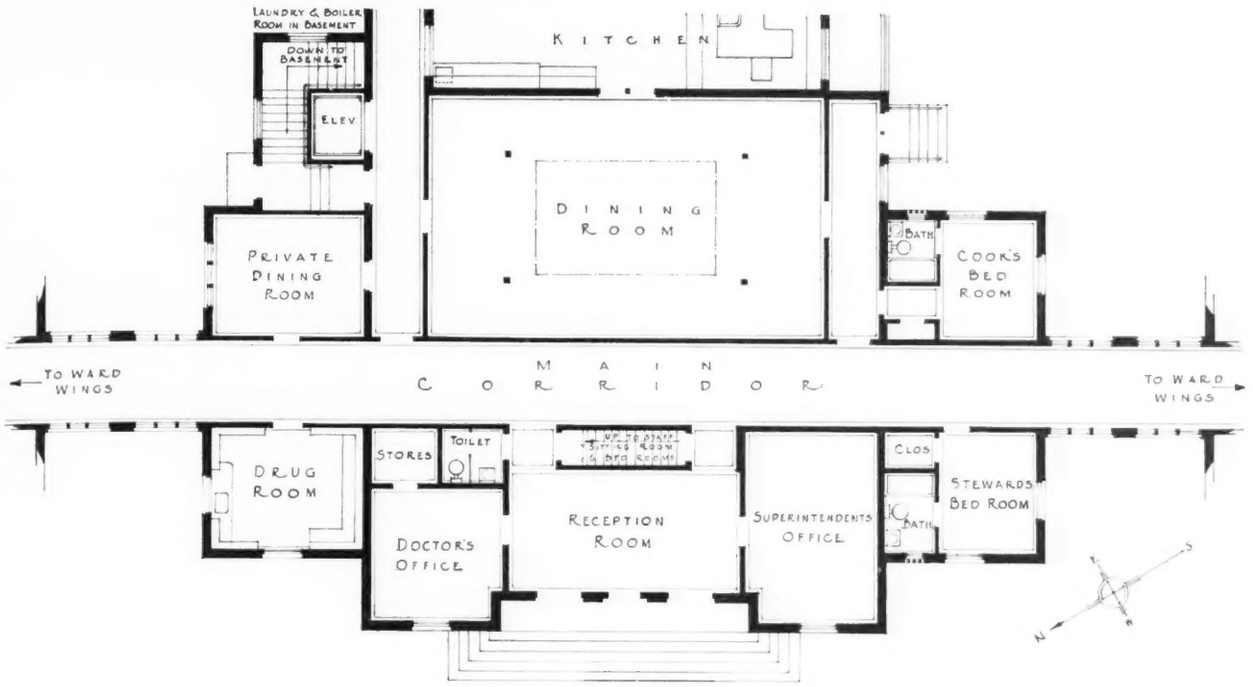
PALO ALTO HOSPITAL



PERALTA HOSPITAL
OAKLAND CALIFORNIA
WILL G CORLETT ARCHITECT

The lobby of a small community hospital, a nongovernmental institution, is shown in the photographs with decorations and furnishings indicative of its use. The size, arrangement and the extent of the adjacent elements usually depend upon the type of ownership and the type of hospital considered.

It is desirable to have good daylight and natural ventilation. There is nothing more depressing than a dimly lighted corridor or lobby. By contrast, direct natural lighting is important in making the lobby a cheerful place. As in all parts of the hospital, the materials and treatment of the floors and finish should be designed with the thought of permanence and low depreciation, as well as of minimum upkeep and repair cost. Beyond this, it is important



Floor plan (above) showing the lobby and private offices of Monterey County Hospital at Salinas, Calif. Location of the entrances is shown below.

that floors be attractive, restful and consistent in design and character of finish with the furnishings.

In each of these plans reproduced the administrative and business offices are made readily accessible. Contact with the administrative officers should be arranged to facilitate the transaction of business as well as to impress upon visitors that hospitals are business-like organizations. While hospitals may not be actual business organizations, they are concerned with the transaction of business and, in the aggregate, the hospital field represents one of the most important enterprises in the country.

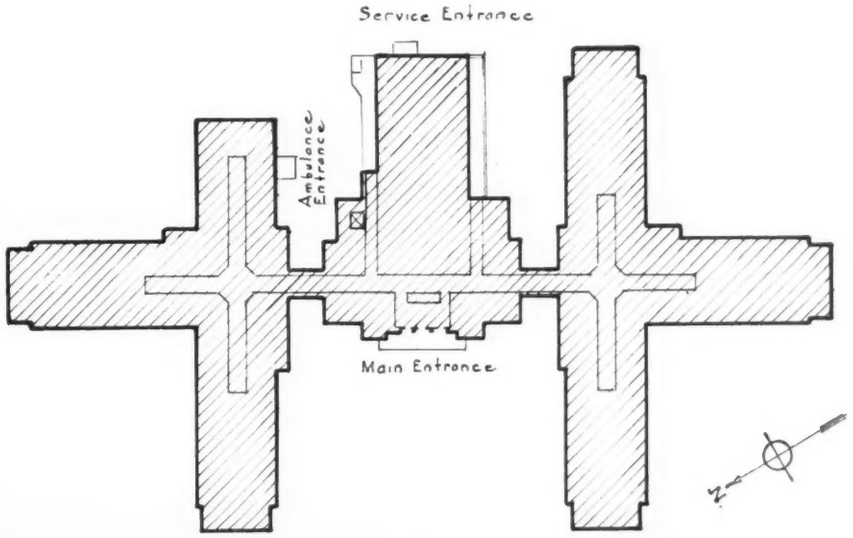
The lobby, then, must have gathered about it the services and personnel necessary to meet the public. Generally speaking, there should be about the lobby: (1) an information desk; (2) public telephone; (3) public toilets; (4) business offices and cashier; (5) bookkeeper and purchasing agent; (6) administrator; (7) switchboard operators; (8) professional offices for medical director; (9) record room; (10) superintendent of nurses' office and (11) perhaps social service, staff room, consultation rooms and library.

The lobby, with its adjacent elements, becomes the centralizing and coordinating feature of the hospital and about it the administrative personnel must meet the public. The executive officer, who must have continual contact with the public as well as with his own administrative personnel, should be within range of the business management.

There has been much discussion concerning the location of the office of the executive. A distant location often spares him needless waste of time in interviews and in handling matters that might well be delegated. It is, however, the consensus that his duties are best performed when he is readily available to transact any matters in which his office is involved. To have help that is competent to determine adroitly the purpose of a visit being made to the executive and to direct people who seek him personally, but whose business may properly be taken care of by someone else, is a better plan of administration.

If the lobby is not to be used for the admission of patients, the receiving room must be near the lobby so that proper control, as well as direction and greeting, may be accomplished on a well-thought-out basis of planned performance. At the same time, the patient's arrival in his room

(*Continued on page* 63)



X-RAY ROOMS

Recommended for

WILLIAM A.

PLANNING an x-ray department for any hospital is an interesting and a complicated problem. The designer should early realize that in order to obtain efficient operation there must be complete collaboration between the building committee, administrator, roentgenologist and experienced equipment engineers.

X-ray rooms may be considered to be of three different kinds: diagnostic, therapeutic and mixed. In the diagnostic group fall all of the radiographic, fluoroscopic, bronchoscopic, dental, biplane and other uses of the x-ray, in which the purpose is to radiograph subsurface conditions in the body. The therapeutic group consists of all of the rooms in which the x-ray is used for intermediate and deep body treatment. Into the mixed group fall a number of rooms, such as cystoscopic rooms and rooms for reduction of fractures under x-ray.

Sometimes in large hospitals the cystoscopic rooms are placed with the operating department of the hospital or in some instances in both departments of the hospital.

It would be folly to recommend the required rooms for both general and special hospitals based upon bed capacity only. The actual number of rooms required should be determined by the roentgenologist and administrator based on volume of business to be done and needs of the hospital.

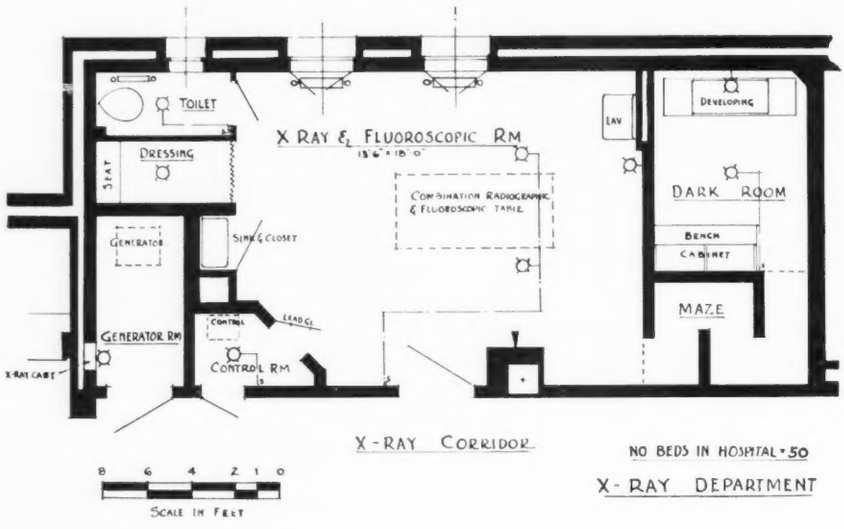
Proper location of the x-ray department depends upon the type of patient seeking treatment. Inpatients, out-patients and ambulatory private patients must all be served. The latter two types, because of their varying demands, will create the most serious problems in the planning. Therefore, a location should be chosen that will be within easy reach of the foregoing types of patients. The location selected must provide sufficient area, be well-ventilated and be capable of expansion.

Most small hospitals, aside from the space necessary for a mobile x-ray, will probably require a completely equipped x-ray room with facilities for the development of films.

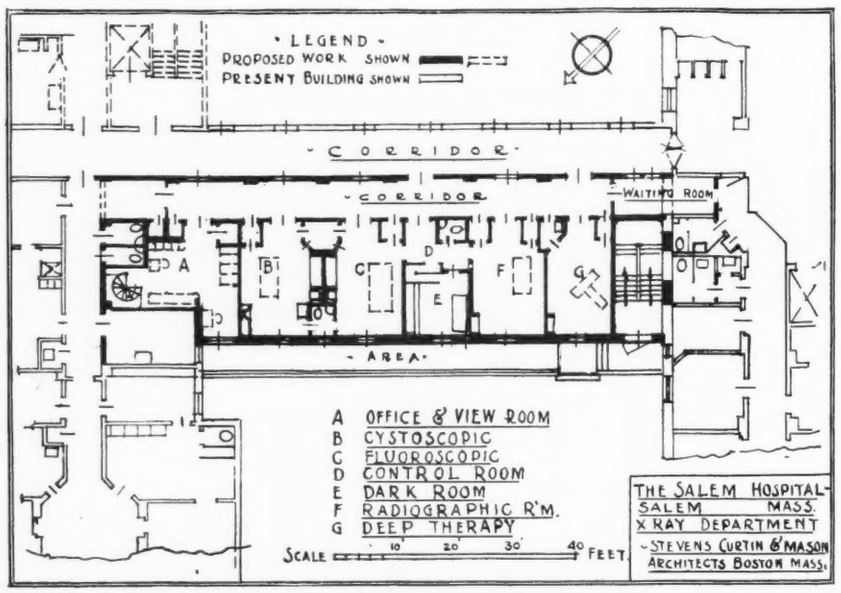
The plans accompanying this article show the x-ray department in small, medium and large hospitals, all of them serving the three types of patients, except the Worcester City Hospital, Worcester, Mass., which renders no out-patient service.

Correct size of x-ray rooms will be determined by the equipment selected. The equipment not only is complicated but is ever changing. Therefore, the best procedure is to consider the equipment first and build the room around it.

The hospital architect, having obtained all of the foregoing informa-



Department layout in a 50 bed and a 200 bed hospital.



NO BEDS IN HOSPITAL = 200

Mr. Riley is associated with Stevens, Curtin and Mason, Boston architects.

X-Ray Departments

RILEY, A.I.A.

tion, can then proceed to develop the plans so that the department as a whole will be properly planned and correlated to the other departments of the hospital.

The radiography and fluoroscopy rooms will require close attention to space assignment and equipment. Modern apparatus permits both fluoroscopy and radiography on one table. In many cases these services can be provided in one room; however, separation of these treatments provides for special work, such as chest, head and stomach radiography.

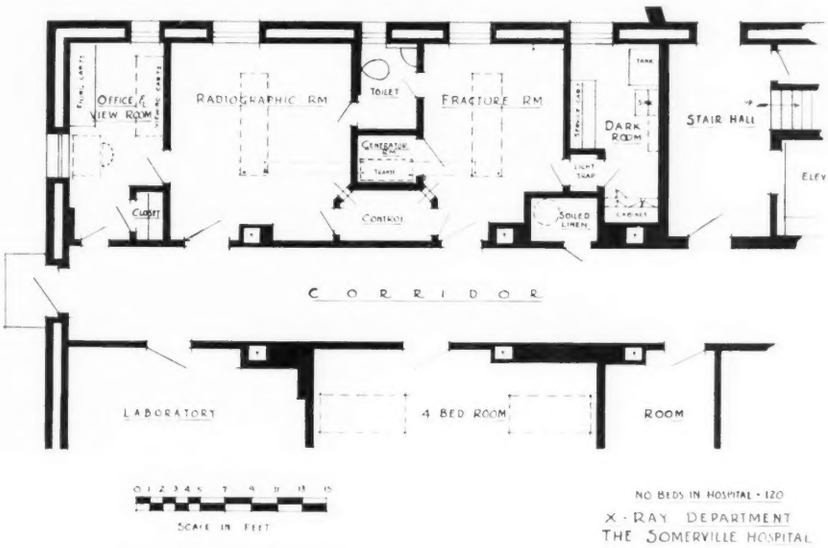
The fluoroscopic room will require sufficient space for the operator and several observers to move freely around the table, as well as room for the hospital bed or stretcher to be brought into the room alongside the table. For stomach pictures the room for fluoroscopy must be equipped with a special type of sink for the barium meal. Because both radiography and fluoroscopy are handled in a darkened room, particular thought should be given to window and door treatment and ventilation.

The radiographic room also requires space for free movement around the table, for a cassette changer and for the hospital bed. Metal built-in cabinets with either glass or metal shelves for instruments will be found useful. Toilet facilities should be convenient to the fluoroscopic treatment room. The radiographic rooms should have at least two dressing rooms, each with two doors, one leading from the corridor and the other leading to the radiographic room.

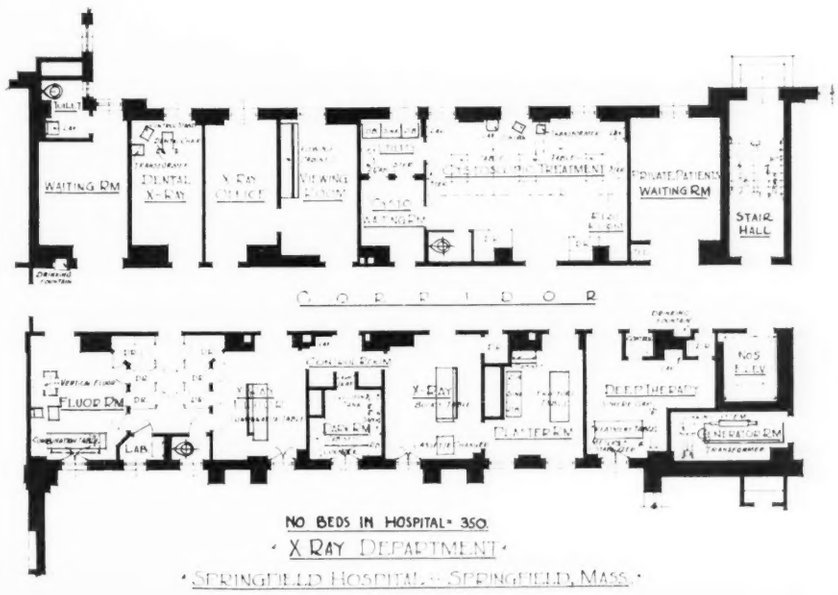
Control space should be not only large enough to provide space for controls and the operator but so located that the operator will have a clear view of the table and the patient while he is under treatment. It is well to provide a lightproof shade or shutter at the vision panel of lead glass in the control room door.

I feel that some cystoscopic rooms should be an integral part of the x-ray department. Some roentgenologists believe that in the average hospital the cystoscopic room should be located next to the darkroom. In any case, it must be large enough to accommodate, besides the patient, the urological surgeon, his assistant, anesthetist, nurses and essential equipment, conveniently located, for carrying out hospital technic.

Sometimes, when space permits, a utility room is provided adjacent to the cystoscopic room for a sink and drainboard and cabinet for instruments, supplies and medicines. If there is no utility room, provision should be made to build in a supply cabinet, a recessed sink and floor space for an instrument sterilizer. It is well to include also built-in wall viewing boxes at a convenient location. If the cystoscopic room is placed adjacent to the darkroom, the installation of a wet film illuminator in the wall between the two rooms will give the urologist an



Department layout in a 120 bed and a 350 bed hospital.



opportunity of seeing his cystoscopic plates in the shortest possible time, without leaving the side of his patient.

The deep therapy treatment room must also be designed adequately to receive the equipment required and must provide space for a bed or a wheel stretcher to be brought directly to the table.

In the average therapy room very high voltages, ranging from 100,000 to 250,000 volts, are employed; consequently, lead is essential to protect the patient, the operator and those in the vicinity of this room. The amount and type of lead protection are described later.

The transformers or generators are best located in close proximity to this x-ray room as the electric conduits are large and require heavy insulation. The actual requirements of space for transformer and the size of conduit and its location should be taken up during the early stage of planning with an experienced x-ray engineer identified with the manufacture of the equipment. Sometimes it is well to have glass in the door to the generator room so that the operator can ascertain if the filaments of all the rectifying tubes are lighted.

Ventilation and light are important requirements for deep therapy rooms, as patients being treated may remain for a considerable time. Built-in instrument cabinets for the various types of x-ray cones and gadgets will be found convenient.

Location of Darkroom

The work shop of the x-ray department, the darkroom, should be located so that there is easy access to all radiographic rooms. It should be large enough to contain the required equipment necessary for the development of x-ray films.

Darkrooms must be arranged for complete darkness for developing films. Hence exterior windows require lightproof shades and the entrance can be by means of a maze or double doors. If a maze is selected, thought must be given to the installation of large equipment into this room.

All darkrooms should contain a developing tank, a film dryer, loading or service cabinet, film safes, racks for holding developing hangers and, in many cases, a film transfer cabinet for the passing of cassettes to and from the radiographic room and the darkroom. Sometimes an additional sink or lavatory is included for the drawing of water for mixing the hypo-solution. An additional feature is the wet film illuminator previously mentioned.

Adequate ventilation is necessary and this can be obtained by using a type of film dryer that will not only dry the films quickly but will also ventilate the room when the duct pipe is connected to the outside air.

The developing tank with its thermostatically controlled hot, cold and ice water, electric time clock and darkroom lamp should be located next to the film dryer so that the wet film can be put into the dryer immediately, thereby saving many steps. In some cases it has been found convenient to locate a metal drip pan over the developing tank, with a drip pipe connected to the tank for removing water from the wet films suspended directly above. It is well to install a floor drain in the darkroom as this room, at best, is messy.

Viewing Room Equipment

In some hospitals of medium size, one large room serves as combined viewing room, office, record and file room and consultation room. This should have approximately 170 square feet and, besides its equipment, should have in close proximity toilet facilities, coat room, technician's closet and a stairway to the general x-ray record room for the storage of films.

The viewing room will need to be darkened at times and, therefore, should have lightproof shades at the windows. Equipment usually consists of stereoscope, illuminated x-ray display cabinets, vertical file cabinets for storage of developed films, roentgenologist's desk and desk for his assistant. The radiologist may like to arrange the battery of illuminators near his desk so that in a seated position he can dictate his findings directly to his stenographer.

There should be at least two dressing rooms to every radiographic or fluoroscopic room and this space should have two doors, one leading directly from the x-ray corridor and the other into the treatment room. Dressing rooms should have a minimum space of 10 square feet and be provided with hooks for clothes and a stool or chair.

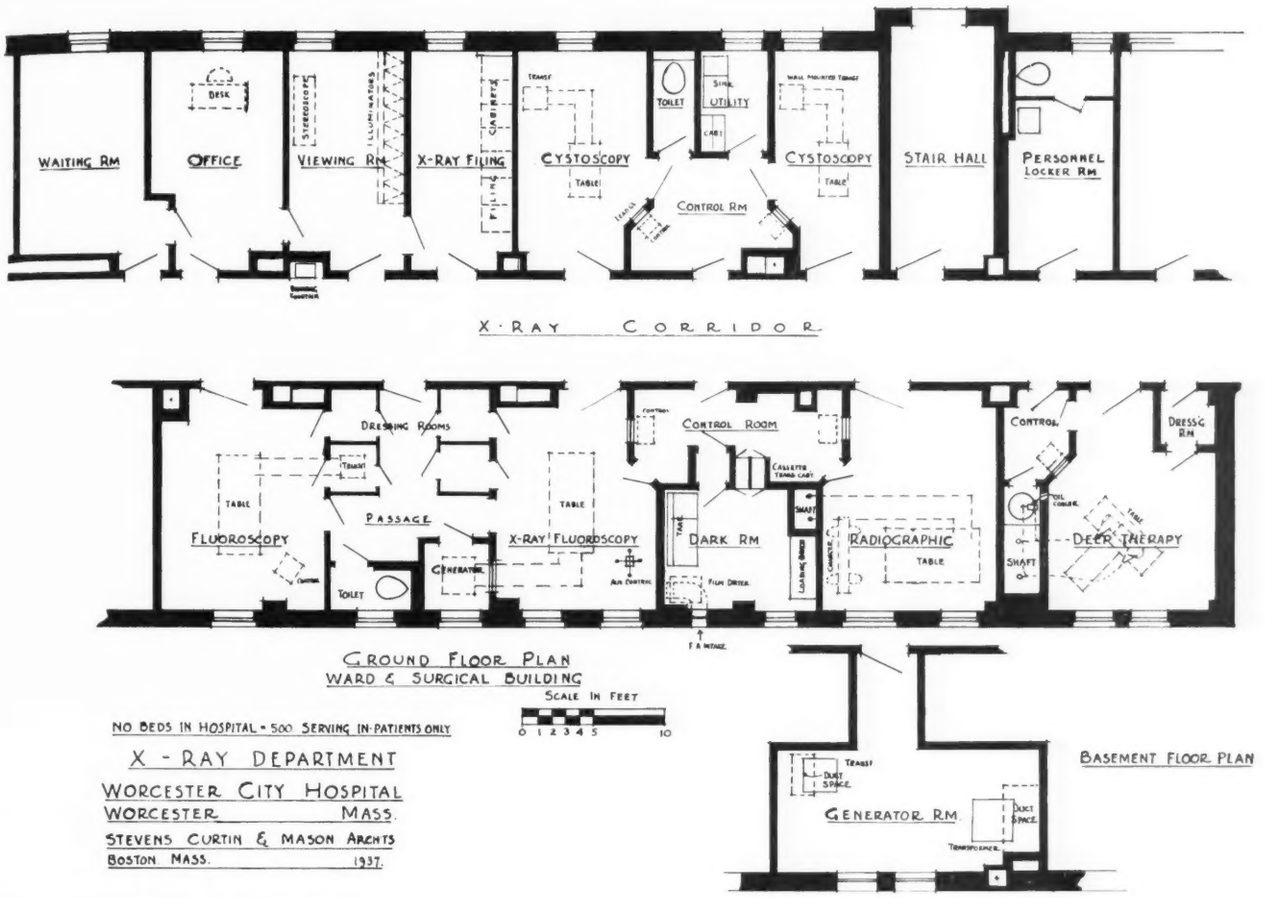
Last but not least is the waiting room. Its size depends much upon the number of out-patients and referred patients making demands upon the department. The room should be large enough to accommodate patients in wheel chairs or stretchers. It should be located conveniently to the out-patient entrance and should be accessible to the other rooms of the x-ray department.

Probably the most discussed requirement in the designing of an x-ray department is the ray protected insulation. Much has been written of late years on this subject. The U. S. Bureau of Standards has set up a table specifying the amount of lead or its equivalent that must be used for protection. The deep therapy department with its high voltage will require special attention as well as the darkroom for the protection of films.

Lead is today considered by many as the most satisfactory element of protection when combined with concrete or structural tile. Need for adequate protection must not be minimized, yet by sound planning considerable expense can be saved.

In general, protection must be provided between all x-ray rooms, offices and darkrooms. Lead may be installed in depressions in the floor slabs to afford protection below and above the x-ray department. One of the simplest methods of installing the lead in the walls is to have the upper edges of the sheets bent at right angles and inserted not less than 2 inches in the horizontal joints of the tile partitions. All joints should be lapped at least 1 inch and should also be spot burned. Both doors and frames should be protected with lead the same thickness as in the walls. The areas to be protected should have the lead protection installed so as to form a continuity of lead

Base the number of x-ray rooms on volume of business, not on bed capacity.



Department layout in a 500 bed hospital having no out-patient department.

throughout the entire room. It is good practice to conceal the lead in the tile partition, as described previously, and then erect free standing wire lath and plaster partitions in front of the masonry partitions.

Control rooms having operator's windows should have lead glass so as to provide protection equivalent to the thickness of lead used in the respective room.

In selecting doors, consideration must be given not only to the kind of wood and the lead lining, but to the size, location and hardware. Doors to ray rooms should be a minimum of 3 feet 10 inches for the passage of a bed. The slab type of veneered door is probably the most suitable. Door frames may well be made all of steel, set flush with adjoining plaster surfaces without molds at the joints between frame and plaster. Wood frames are likely to become damaged from movement of equipment, no matter what size the opening is.

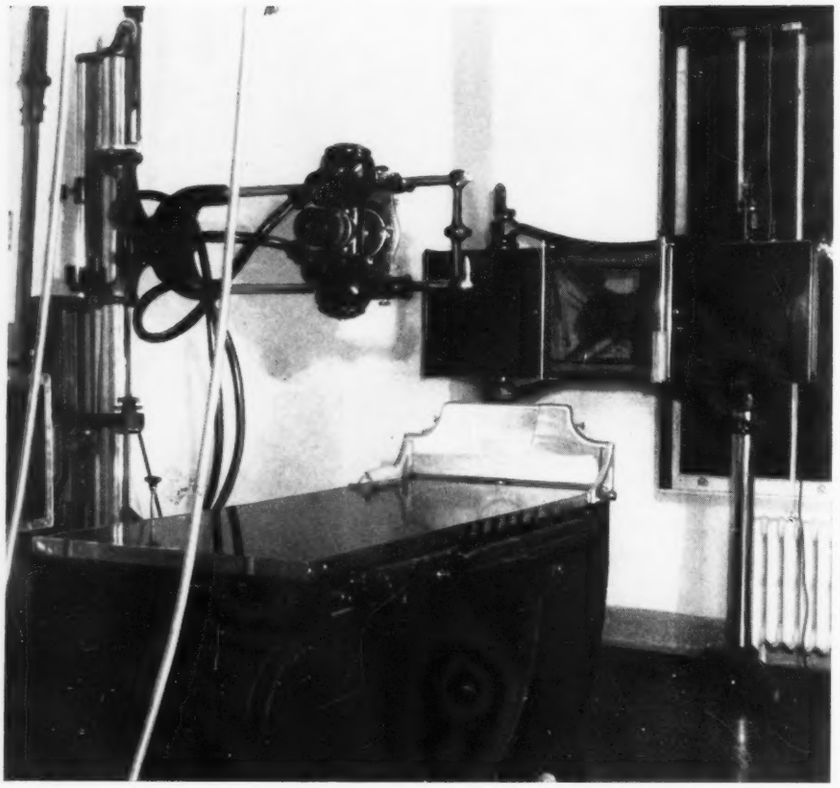
Floor material can be either asphalt tile, rubber, linoleum, terrazzo or cement, depending upon costs and adaptability. The cystoscopic room should have a permanent floor finish, such as terrazzo, and this holds true for darkroom, toilets and utility rooms. Terrazzo is the most expensive in respect to initial cost, but in the long run it is the best finished surface. Asphalt tiles, linoleum and rubber tiles are well suited for the treatment rooms, offices and x-ray corridors and various color schemes can be obtained.

Plastered walls of all treatment rooms might be finished with lead and oil paint in fairly light colors, possibly light ivory for door and window trim and a shade darker for the wall areas. The ray rooms are patients' treatment rooms and should lend a cheerful atmosphere. In the x-ray corridor or waiting rooms, rubber dadoes, set flush with plaster surfaces not only will protect the wall from the movement of stretchers and beds, but will afford a pleasing contrast in color and texture.

Ceramic glazed tile has been found satisfactory as a finished wall surface for dadoes in toilets and at recesses at all plumbing fixtures. The cystoscopic room also should have a tiled dado.

Soundproofing or acoustical treatment is well worth considering to reduce noise, to improve appearance, and, where the ceilings over the treatment rooms are furred, to conceal the unsightly shockproof cables. The acoustical panels can be easily removed or an access panel installed in the ceiling. Office and viewing room, waiting room, treatment rooms and control spaces are rooms that may well be treated.

The major portion of the plumbing will be for the darkroom. The developing tank may be a combination of a developing and fixing solution tank with a thermostatic valve for automatically mixing hot and cold water to any desired temperature. It is well to remember that a faucet is not always provided with the equipment and a separate sink may be necessary for draining water for mixing. Floor drains should be



installed in this room as well as in the cystoscopic room. When cooled water is not attainable, a combination tank and refrigerator unit combined in a single cabinet is considered satisfactory.

Aside from toilet fixtures, maids' closets, slop sinks and drinking fountains, it is necessary to provide a deep sink in the cystoscopic room with provision for hot and cold distilled water. The fluoroscopic room should have a sink for mixing barium meal and this sink should have a smaller sink mounted below. Deep therapy rooms and plaster rooms should have lavatories and sinks. Stainless metal shelves mounted over the lavatories with toilet accessories may well be included.

Air conditioning is an important feature for all treatment rooms, especially the cystoscopic room, unless the cost of complete air conditioning is prohibitive. It is well to employ the services of a qualified heating engineer to design the department so that there will be proper temperature control and ventilation.

In the x-ray department, many of the rooms are inside rooms, and sometimes the darkrooms are completely shut off from the outside air, which necessitates complete air changes and a proper electrically operated ventilation duct system.

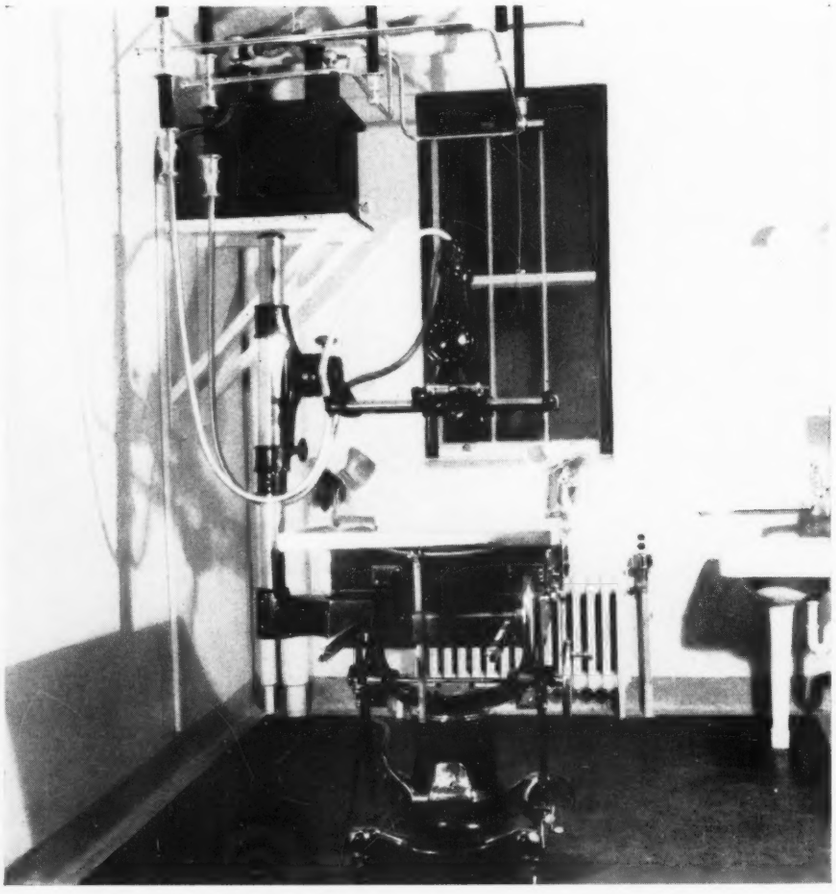
Some surgeons sterilize the cystoscopic instruments by the use of formaldehyde, which may be done inside a compartment of the instrument cabinet. However, this compartment should be fumetight with an airtight vent controlled from the exterior of the cabinet.

Radiators should be of the hospital pattern, with high legs and set away from the wall to ensure easy cleaning.

The x-ray department will require much electrical equipment and gadgets. Wiring is complicated and therefore it is important that the x-ray manufacturer be consulted as to the proper size of conduit, layout and design. Practically all x-ray generators operate at 220 volts and this line should be apart from the wiring for the rest of the hospital.

Wall film illuminators and viewing boxes should be located so that they are the proper height from the floor. An intercommunicating telephone system between deep therapy, radiographic, fluoroscopic, cystoscopic departments and the office has been found to be practicable.

Above: Radiographic x-ray table with stereoscopic shift for chest work. Below: Cystoscopy table.



Accidents Will Happen

PERRY W. SWERN

Suggestions for Handling Accident Cases

1. Remember that an accident room must not be too small; almost anything can and will happen in it.

2. Equip each accident room for technical surgical procedures (emergency sterilization, scrub-up, waste disposal) and for plaster work. Provide ample storage cases for supplies, plaster, splints and stretchers.

3. Remember that wherever stretcher carts or wheel chairs are to be used there must not be steps, sills, raised thresholds or perforated rubber mats; there are no springs on most of the carts and a ride over such bumps is disagreeable.

4. Study the travel lines of patients and nurses to see that it is possible to get to all the other departments of the hospital easily and quickly. Do not forget the telephone; house and public connections are needed badly at times.

5. See that a nurse in uniform is the first person to contact the patient; the experience of the reception may last a long time in the patient's memory. Remember patients have come to a hospital expecting professional care; if the admission procedure is delegated to orderlies or clerks the psychological effect on the patients is not what it should be.

THE emergency department in our modern hospitals is becoming more important in the service it has to offer the public. Unfortunately, serious accidents seem to be on the increase. When automobiles get together now it is usually more than fenders that become damaged. Because of the complications of modern machinery, when industrial accidents occur they usually produce major problems. Emergency service is just what the name implies and, unless such service can be rendered with precision and dispatch, it is often of little value. Delay in admission to or egress from the needed facilities may mean the loss of a life.

Every hospital, regardless of size, must be prepared to handle this type of patient. Unless there is a sudden reversal from our mania for speed, the volume of this work is going to increase in the days to come. To render this emergency service on a self-supporting basis is the real problem. Collecting bills for emergency work always has been a headache for the administrator. The ability of the patient to pay cannot be ascertained before rendering service; hence, it is desirable that the cost of the individual service rendered be held to a minimum so that the uncollectibles do not upset the budget. We have heard hospital executives say that they did not care if their accident department was unpopular, because it was so difficult to collect for these services. This represents a shortsighted view.

Accident cases do not come in with regularity and, unless the community served is large and other hospitals are at a distance, planning for the probable demands is largely guesswork. Usually cases come in groups; almost every automobile accident involves more than one.

The author is a Chicago hospital architect.

The real cost of emergency service comes in the overhead and stand-by personnel necessary to take care of the emergency work when it comes in. Naturally, if the work is light and the cost is spread over a few cases, the unit cost becomes almost prohibitive to the average person. If bills are rendered on this basis they are doubly hard to collect.

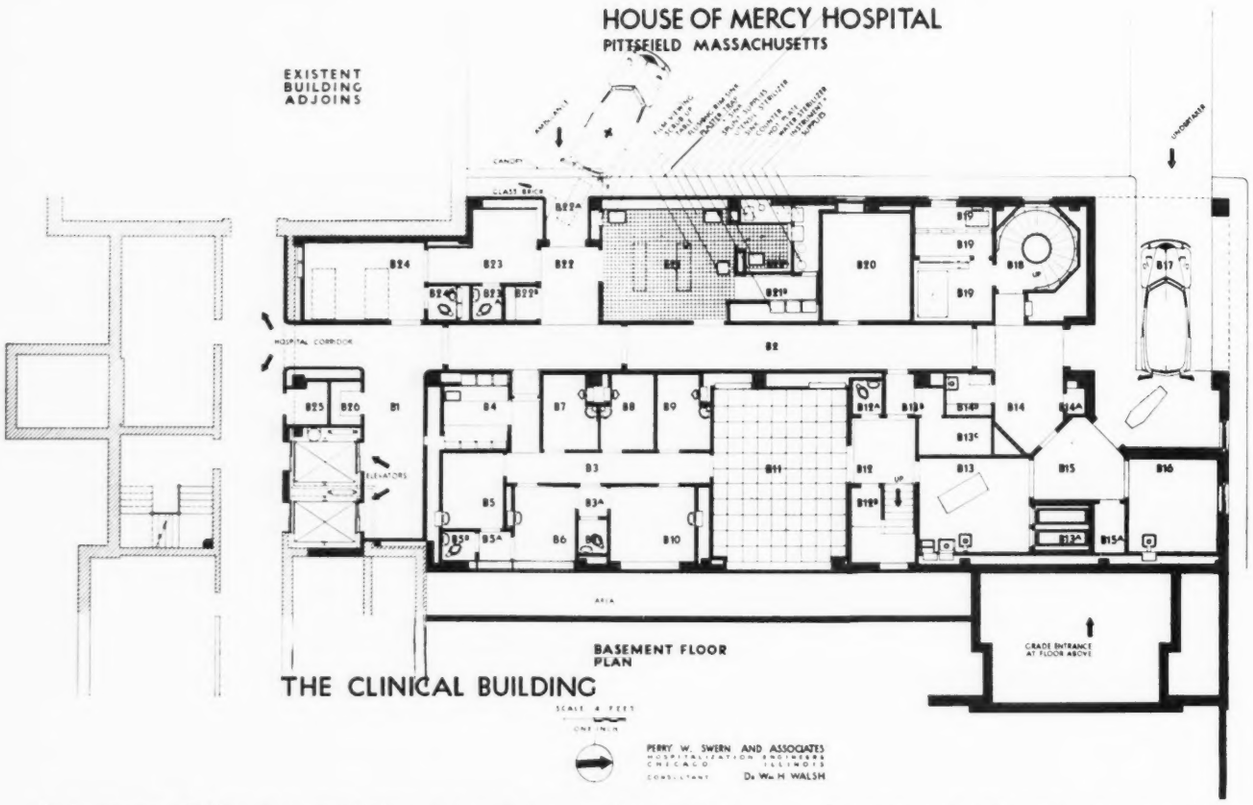
The purpose of this article is to suggest that, with proper planning, the work of this department can be dovetailed into other departments, so that when emergency cases come in the personnel can be quickly assembled and the services rendered without upsetting the routine of the hospital. A large percentage of emergencies involves major surgical procedures and much x-ray work, which indicates that the personnel of these departments can well serve the emergency department, particularly in the smaller hospitals, if the contacts and circulation make it possible.

Accident cases are usually dirty and mess up things considerably. It seems a waste of energy to take them into sterile operating rooms that have been set up for major surgery; also, many of the cases are beyond the help of the hospital and must go to the morgue.

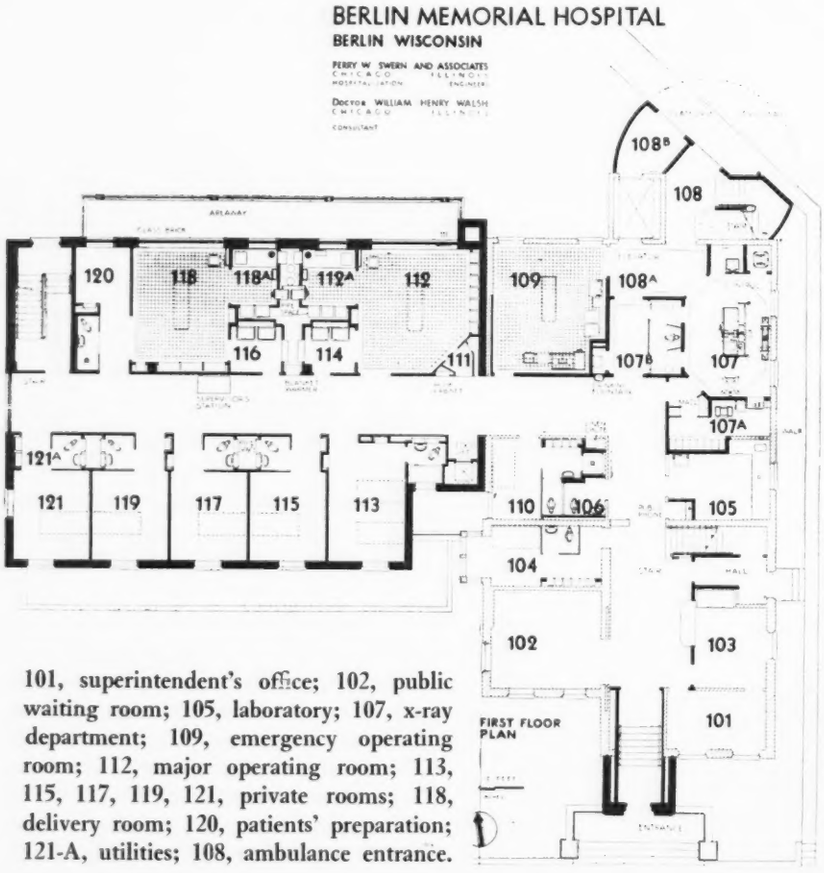
With all this in mind there seems to be good reason for establishing an accident room—let us call it a clean-up room, if you like—near the ambulance entrance, where the services can be started. If the injuries are minor or are not severe enough to require bedside care, they can be taken care of here; if surgery or x-ray is needed the patients can then be routed to the various departments, without upsetting the standards of cleanliness. If death has occurred the travel to the morgue must be inconspicuous. Unfortunately, there is considerable commotion around an accident case. Friends and relatives will upset all rules and provision must be made so that they can be comforted and still feel that everything possible is being done.

Many accident patients, if not hurried, will recover sufficiently in the clean-up room, to be discharged without being put to bed. Why upset a room or a ward bed for a couple of hours' stay? It increases the patient's bill and gives the impression that bed patients are the only ones in whom the hospital is interested. Any hospital that cannot render service without first putting the patient to bed is not serving the public to the best advantage.

This prompts the suggestion that some recovery cots be placed near the emergency admissions, where the injured can catch their breath, so to speak; perhaps they will want to be taken home or to another hos-



B 1, entrance lobby; B 4, sterilizing; B 5 and 6, gynecology; B 7 to 9, genito-urinary; B 10, genito-urinary and gynecology; B 11, waiting room; B 12, storage; B 13, morgue and autopsy room; B 15, refrigeration machine; B 16, undertaker; B 17, service entrance; B 19, machine room; B 20, pathology museum; B 22, ambulance entrance; B 23, relatives' waiting room; B 24, recovery room; B 25, soiled linen, and B 26, supply room.



101, superintendent's office; 102, public waiting room; 105, laboratory; 107, x-ray department; 109, emergency operating room; 112, major operating room; 113, 115, 117, 119, 121, private rooms; 118, delivery room; 120, patients' preparation; 121-A, utilities; 108, ambulance entrance.

pital. Keeping these cots in order means little expense compared to the "make ready" of a hospital room.

It is difficult to set down any standards for an emergency department, because the size of the hospital, previous procedures, community customs and available funds all play an important part in establishing the department layout. Each problem needs to be studied separately. It is believed by many that new construction is the only way to obtain an ideal emergency department, but this is not true. Many excellent departments have been worked into old buildings.

The ambulance entrance, through which all emergency cases should enter, whether they come by ambulance, taxi, private car or on foot,

Delay in admission to needed facilities or egress from them may easily mean the loss of a patient's life.

should be located so that it is easy to find; yet it should not be conspicuous or annoying to hospital patients. Remember that many strange drivers will drive up to the hospital and, in haste, will make traffic violations. Sharp turns, blind corners or drives that require skillful maneuvering are hazardous.

This entrance must avoid conflicts with other services; the accident patient and his relatives will resent being handled with the garbage, ashes or the dead. Many hospitals allow emergency cases to be brought in the front door; this upsets the lobby and executive personnel of the hospital and has a bad psychological effect on the patient. They should be taken in quietly and with as little notice as possible, for few people embroil themselves in accidents just to obtain notoriety.

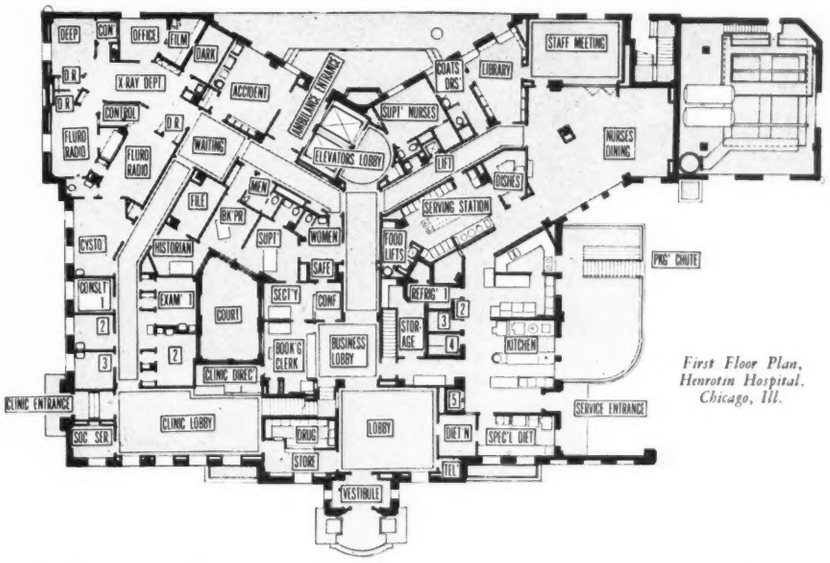
The clean-up rooms should adjoin the ambulance entrance; complicated doors and much swinging of cots or stretchers only delay the beginning of the repair work on the patient. The equipment of the clean-up room will vary with the procedure that is to be followed. In some hospitals it should be set up as a major operating room; in others it need be a preparation room only. In all cases this room should not be too small for there will be witnesses, relatives, officers of the law and others who will not leave until they are convinced that the patient is being cared for by hands more expert than theirs; besides, the other fellow in the accident may be brought in before the doctors are through with the first one.

From the clean-up room the patient may be sent to the nursing floors, surgery, x-ray department or the morgue. In all cases time is important and the circulation to these departments should be direct and easy to negotiate. This means usually that the vertical transportation must be close at hand, because these facilities are seldom all on the same floor as the clean-up room. Egress from the elevators must be so arranged that crossing of general public travel is avoided. Remember that accident patients and the people with them are still in a nervous condition, and confusion or lost motion is annoying.

If the patient can be wheeled directly from the emergency room into a radiographic room where pictures can be taken and then back to the emergency room for splints and casts, much of the dirt and confusion of this work can be kept out of the hospital and some of the patients can then go home without other contacts with the hospital. This is not always possible and usually is not desirable, especially in large hospitals where the cases coming in may be close together. The emergency room should not be tied up for long. It does not seem advisable to set up a special x-ray room adjacent to the emergency room to handle the work of the accident cases only. The problems of extra equipment, developing technic, drying and reading of film suggest that this work can be better handled in the x-ray department with the other x-ray work. However, accident patients going to and from the x-ray department must be given the right of way and telephone connections between the emergency and the x-ray department should clear the way so that no long waits in the x-ray department are necessary.

Briefly, the emergency department is the admitting department for some very sick people. If they are handled with dispatch, without confusion and without the feeling that their presence is undesirable, the prestige of the hospital will be enhanced. They will talk later and their friends and relatives will gauge the services of the hospital by the patients' reactions to the hospital's response to them in the first few minutes.

The ground floor plan of a small hospital (40 beds) in a rural community is illustrated. Here the emergency room is adjacent to the surgery so that the surgical personnel can service the department. In fact, the operating room was placed on this floor so that the surgical personnel could handle both services. (Glass brick now eliminates the necessity for operating rooms being high up to avoid outside vision into them.) The room is fully equipped and can be used for overflow operations if necessary.



First Floor Plan, Henrotin Hospital, Chicago, Ill.

Location of emergency entrance and adjacent facilities in the 110 bed Henrotin Hospital, Chicago, which stands on a very small corner plot.

The ground floor plan of a private city hospital (110 beds) is reproduced. Here the emergency room (labeled accident) is adjacent to the x-ray department on one side and the ambulance entrance on the other; it has direct access to the elevators. This room is equipped to do everything but major surgery.

Another plan shows a portion of the ground floor of a larger hospital in a small city in the eastern mountains, where talking about one's accidents is almost as popular as talking about one's operation. This plan deserves study because all of the features of a busy department are provided.

NURSING SERVICE

Shortening Nurse

JOSEPH C.

THE most important end to be gained in shortening travel lanes for nurses is the welfare of the patient. An increased number of steps to and from the patient's bed immediately results in less thorough baths, fewer sponges and enemas, more hurried medication and, of no little importance, less valuable education for student nurses. In addition, a reduction in the amount of physical effort required of the nurse during her day's work means less fatigue, because of less physical and mental strain.

Inexpert architectural and administrative planning, the latter affecting all types of hospital workers, results in increased fatigue and nerve wear on the hospital personnel and a decreased efficiency in patient care.

As the day opens, the nurse reports for duty. Great distances often separate her dwelling place from the hospital. Her day is inaugurated by hurry, an urge that lasts during all of her hours on duty. Unnecessary travel is found even in the nurses' residence. Toilets and washrooms frequently are placed at the extreme end of corridors. It is a common practice for hospitals to rent adjacent dwellings for this purpose, when additional accommodations for nurses are needed, and it usually is impossible to adjust temporary living quarters to nurses' needs.

In the dining room, the necessity for hurry does not place the nurse in the proper physical or mental condition to enjoy and digest her breakfact. The cafeteria idea is more excusable at the breakfast hour than at any other meal time, but the necessity of being on time for the morning check-in and for the morning report in the ward is another factor in starting the day wrong.

On the ward, the nurse's first assignment depends upon the tasks already accomplished by the night nurse. Usually she will find that patients have been awakened at 6 o'clock in order to receive their preliminary bath and that they have been required to eat their breakfasts before daylight so that they will be ready for examination and treatment some hours later.

The duties facing the nurse may be set down under two main headings: (1) the "animal" care of the patient, and (2) the scientific care and treatment of the patient. In all of these activities, not only must the nurse be at the bedside but materials, supplies and apparatus of all kinds must be transported to and from their storage places. Here the physical planning and equipment of the ward enter into the picture.

Wards are of several general types and shapes. Some hospitals are apparently planned on the erroneous theory that nurses wing their way from distant service rooms to far off beds without incurring fatigue. Certainly the hospital field has not yet been given the efficiently planned ward. There is today a strong tendency to construct small units for the housing of patients. Isolated units in out of the way places must be visited by nurses and doctors on scores of occasions.

There are several different types of ward planning: the long ward with service facilities located at one end; the long ward with service facilities leading from it at right angles at the middle, the toilets being on one side and utility rooms and diet kitchens on the other; the rectangular shaped ward with quiet rooms at one end and with a subutility station placed near by, the main group of ward beds and main utility room being constructed at the other end.

Less wear and tear on both graduate and student nurses, as well as great time saving for bedside care, will result from better administrative and architectural collaboration

All these general types of planning depend upon the arrangement of the major lines of travel from such hospital utilities as the kitchen, x-ray department, physical therapy department and operating rooms for their efficiency.

Most important in saving nurses' steps is the proper location of the utility room. Here are to be found patients' trays, running water with slop sinks, wash basins and cloths and other necessary minor equipment. In many hospital wards the nurse must travel from 10 to 20 yards or more to reach utility rooms in order to empty a basin of soiled water or to obtain a fresh supply. If the wringer is located in the utility room, it is often necessary in giving hot packs or applying stupes for nurses to travel many yards every fifteen or twenty minutes to wring blankets or stupe flannels.

In the administration of enemas and in the distribution and collection of bedpans, a subutility station, located near the center of the main ward, will save time and steps. Moreover, long lines of travel for bedpan service are insanitary and disadvantageous.

Inefficient methods in serving food are the source of much lost time. Some hospitals still adhere to the system of transporting bulk food to a ward diet kitchen, there setting up trays and having the trays served individually by student nurses. The amount of effort wasted in delivering and collecting trays and in making extra trips for the transportation of beverages and forgotten tray articles is great. Perhaps the most efficient method for wards is to serve each tray from a heated diet truck placed in the middle of the ward or wheeled to each bed. This is economical because the nurse or dietitian serving the tray may learn the patient's food likes and dislikes.

Wheeled ward units are being em-

Travel Lanes

DOANE, M.D.

ployed frequently to save time. These include the dental cart, the dressing cart for medical as well as surgical wards, the orthopedic cart and the chart carriage. A central service for all special dressing and other special trays economizes on supplies and saves time for nurses.

It is highly extravagant to convert the nurse into a messenger girl for errands that might be performed by a person less valuable to the patient. Although the employment of a chart cart is a useful method of saving nurses' steps, in many good hospitals nurses are still seen with arms full of chart boards.

A few words may be said regarding the extra-ward activities of the nurse. Much of the time during which she is absent from the patient's bedside is spent in performing porter service to distant hospital departments. Perhaps the greatest waste of bedside nursing time results from wheeling patients to the x-ray department. There the nurse, although her presence is badly needed in the ward, cools her heels while a group of physicians discusses some other case. If the patient is to remain in the x-ray department for a long time, the nurse returns to the ward and is later required to repeat this trip.

In some smaller institutions student nurses are required to assist in the transportation of special diets from the kitchen to the ward, a practice to be condemned.

In the private floor worse examples of planning may be observed than in the wards. While the nurses' office is frequently located near the elevator, utility and bathrooms are likely to be at a distance. Hence, the giving of ordinary nursing care to the private patient without a special nurse is highly time-consuming. It is a common experience at certain times of the day to observe a procession of bedpans in the hallway of the private suite. Special utility stations, each with a slop sink, should be built in at intervals along corridors.

The diet kitchen for a large private floor is unlikely to be centrally located. Improperly placed diet rooms multiply travel distances and disturb patients through the clattering of trays and the rumble of diet trucks at unusual hours. It apparently has been forgotten that the private patient requires the same service from a utility standpoint as the ward patient. Nevertheless, distances of patients from utility rooms are likely to be greater on the private floor; hence, the need for more generous provisions for this type of unit. Whenever there is running water in each room, many steps are saved. Bathrooms may not be of great service to a bedfast patient but they facilitate his care.

If careful engineering principles are applied to the planning of a hospital floor, the institution is likely to receive splendid interest on this investment, although a few duplications of utility, bath and toilet rooms are necessary.

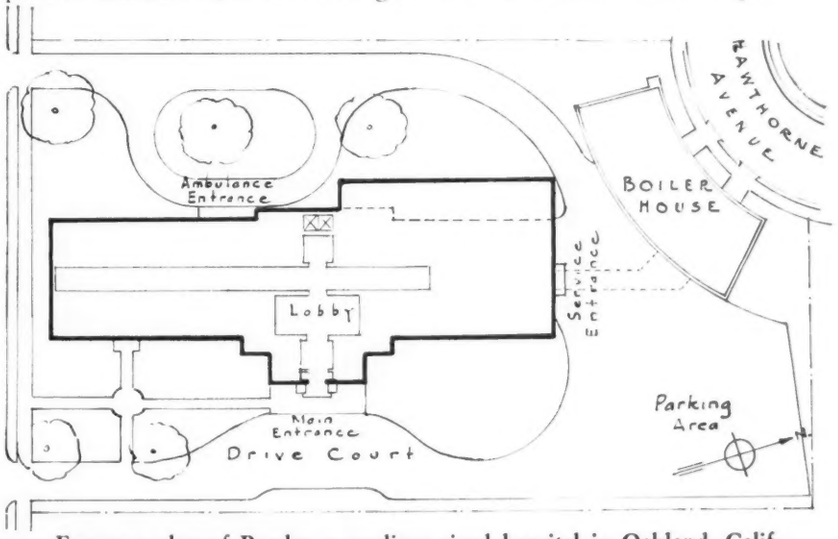
For example, if thirty minutes a day is saved each of 100 student nurses, fifty hours' service of one nurse is the result. If the same length of time, and this is used as a minimum figure, is saved daily in the case of each of 50 graduate nurses, dollars mount most unexpectedly. The minimum number of hours of bedside service adequate to the daily care of a ward patient has been set at four. It is not difficult to compute the added hours possible if the time of a large nursing force is properly conserved for bedside care of patients.

Best Foot Forward

(*Continued from page* 53)

must be expedited so that he may obtain attention immediately. When the lobby is used as a waiting room, care must be taken lest sorrowing relatives make a demonstration.

The expense involved in the planning and construction of a suitable entrance and lobby is of considerable importance, as it is nonproductive from the standpoint of income. Expensive decorations, floor coverings, ornaments and furnishings should be chosen for the utility and facility for which the lobby is designed and used, and, also, they should be in keeping with the rest of the institution. Skimpy expenditures unjustly reflect upon a hospital well planned, well constructed and properly furnished; while, on the other hand, a lobby too elaborate and gaudy will leave a similar unfair impression.

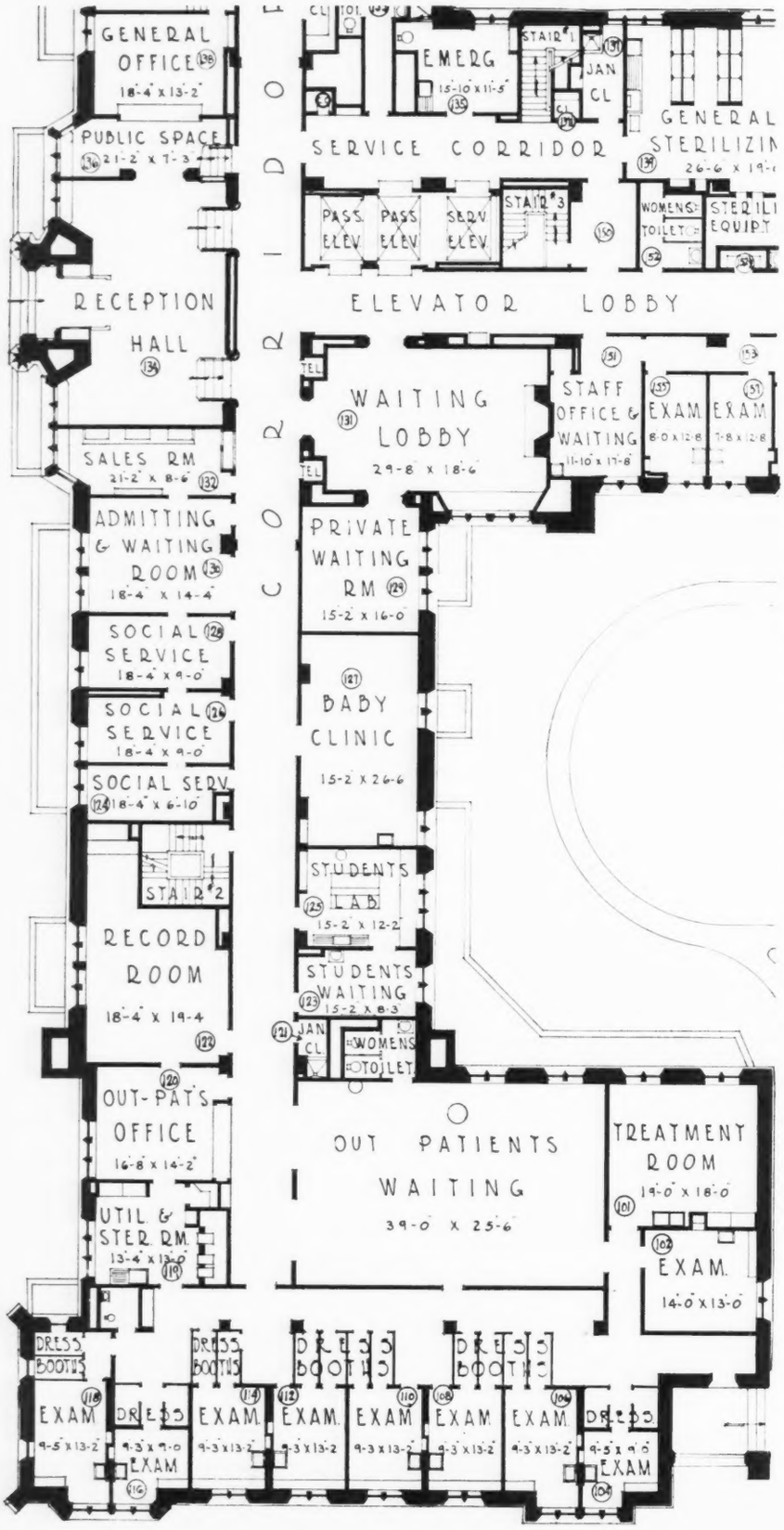


Entrance plan of Peralta, a medium sized hospital in Oakland, Calif.

SOCIAL SERVICE

Facilities for

IDA M.



SOME dreams *do* come true! Only the most optimistic of the pioneers in hospital social service could have hoped that in three decades architects would take seriously into consideration allocation of space for a social service department in up-to-date hospital construction.

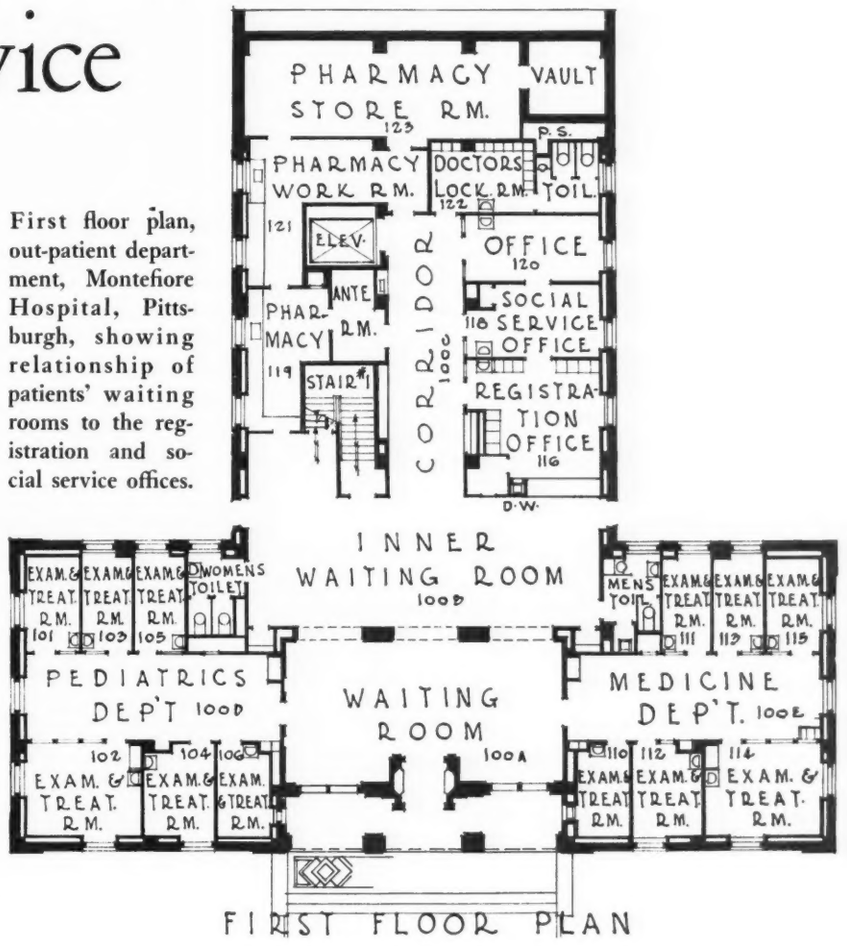
The process of obtaining material for an article on quarters and facilities for social service has been intriguing to one who has experienced these three decades of growth of social service in hospitals and dispensaries. Memory holds vividly clear "The Corner" of the early years when we had insignificant local habitation and no name. "The White Corner," a later designation, gained no more space; it was about 15 by 8 feet, but white screens were placed around two tables to obtain more privacy. One of my correspondents reports that, in 1908, social service in her hospital was placed "in the busy corner of an unattractive out-patient waiting room" with white screens about the table because after visiting "Doctor Cabot's Social Service," it was assumed that such was the ideal arrangement!

Those were exciting days as all pioneering is exciting. The patient's need of some supplementary personal interest was evident. But the function of social service was not clear. Organization in relation to clinic and administrative departments of the hospital was not defined or recognized officially. In fact those were the days when there was so much skepticism about social service as a legitimate part of the hospital organ-

An unusual social service department is that of Chicago Lying-In Hospital. Social services are placed between the hospital admitting department and the outpatient services and very near the baby clinic. Schmidt, Garden and Erikson were the architects.

Social Service

CANNON



First floor plan, out-patient department, Montefiore Hospital, Pittsburgh, showing relationship of patients' waiting rooms to the registration and social service offices.

ization that the question of allocation of space was not taken seriously. We were lucky to get inside the doors.

Those days are passed. The scene changes. At its annual meeting in 1918 the American Hospital Association gave official recognition to medical social service. I suggest that it was then that a responsibility was placed on hospital administrators to consider the possibility of a social service department as part of the hospital organization. Thereby was added to the hospital architect's already complicated problems that of including in new hospital plans suitable quarters for a social service department.

Every executive of a social service department recognizes that provision of suitable quarters and equipment is fundamental to adequate functioning of the department but, curiously enough, we find little published on this subject.

In 1920 the American Hospital Association made a survey of social work in 61 hospitals. The field secretary gives the following report on "accommodations" for the social service department:

"As social service had developed in hospitals and dispensaries as an afterthought in most instances, it was natural that the staffs should be obliged to use rooms devised for other purposes. The chief difficulty seemed to be crowding. Sixty per cent of the rooms were overcrowded. In one department 16 workers busied themselves in one room about 16 feet square. Ten of the departments were located in basements; that is, more than half the height of the rooms was below ground. In seven departments the workers had no privacy. It was impossible to hold a personal interview without the conversation being overheard, not only by other members of the staff but usually by a group of waiting patients. One of the chief defects in these quarters was an absence of provision for the filing of records. The nature of the work requires numerous records of a confidential nature. In planning for a department, space should be assigned to this purpose."

The committee in charge of this survey, in presenting its report, however, failed to suggest any requirements for space or equipment. The report focuses on function and organization, as related to clinical service and hospital administration and organization. That medical social service had come to stay was no longer questioned. Attention was given to personnel but not to space in which that personnel might work efficiently.

In the statement of minimum standards prepared by the American Association of Medical Social Workers in 1928, we find only this, "Medical-social case work requires personal conferences with various individuals in matters that are often of a confidential character. This makes it necessary that the department should have office facilities which afford as great privacy as possible and at the same time are readily accessible to patients and physicians." By implication, there should be a place for records. "The privacy of the social case record should at all times be safeguarded."

By 1936 the association realized the fallacy of declaring minimum standards and published a revised "Statement of Standards to Be Met by Medical Social Service Departments in Hospitals and Clinics." Here there are the following three sentences: "Provision should be made for a central office for the social service department and for such individual offices as the professional staff, in the performance of its social work activities, may require. The offices should be accessible to patients and to doctors but should afford privacy for interviews. For its efficient operation, the social service department needs to have adequate clerical assistance, filing space, office equipment, telephones and means of transportation."

This statement about facilities follows a statement of the suitable activities of a medical social service department. This is as it should be.

Miss Cannon is chief of the social service department, Massachusetts General Hospital.

Any convincing argument for floor space, designation of location and equipment must be based on a declaration of the responsibilities placed on the personnel of a social service department in performance of functions that are accepted as suitable.

It was Dr. Malcolm T. MacEachern who urged us to commit ourselves to a statement of standards that might be accepted by the American College of Surgeons in the hospital standardization report. Convinced of the value of medical social service, Doctor MacEachern gives, so far as I can find out, the fullest statement about facilities for this service in his valuable textbook on "Hospital Organization and Management." He would have a waiting room for patients with comfortable chairs and, happy thought, he recognizes that it should be attractive so that waiting may not be tedious. He states that the general office must be provided with desks for the staff, typewriters, files, bookcase and telephone facilities.

But what of 1939? To obtain information, letters were written to some dozen architects who were known to have built hospitals in recent years and to 15 directors of medical social service departments, asking for their experience with their assigned quarters and equipment.

The replies from the architects are of interest. They give evidence that some of them clearly understand functional organization of social service in a hospital; most of them suggest the need of more knowledge of what is desirable in floor space and location. It is a pleasure to get from one experienced hospital architect the statement that it is his practice to plan "a private office for the chief of social service and smaller offices for interviews for the case workers, as a rule, located as a part of or near to the admitting section of the hospital or preferably the out-patient clinics." Another experienced hospital architect writes that he regrets that "all too often space allotted to this important branch of hospital work is something left over, not as it should be, planned in advance to meet needs of the department." How familiar that is! Another writes: "the investigators have a desk and file in general offices." Thus it is assumed that social service is primarily concerned with eligibility.

Another architect of considerable experience is specific about his experience. "The location of a social service department is of major importance. It should be located in, or immediately adjacent to, the O.-P.D. and near the registration desk so as to be easily accessible to all out-patients. It also should be accessible to ward patients when they enter the hospital, this problem being simplified if they enter through the clinic. Also it is advisable to have this department adjacent to the record room. It is difficult to fulfill all of these requirements in a plan, but we have listed them in the order of their importance. If space for the entire department cannot be found in the O.-P.D., some of the clerical and follow-up work may be done in offices at another location in the building without too much inconvenience.

"The size of the department and number of rooms depend naturally on the size and type of the hospital. All of the work for a small hospital could be handled in one or possibly two rooms, but a larger institution with a generous sized clinic should have the following: (1) a waiting room with at least two booths opening off of it, for preliminary interviews; (2) a general office; (3) a

The waiting-conference room at Provident Hospital, Chicago, is intended for community health meetings. Schmidt, Garden and Erikson, architects.

headworker's office; (4) an assistant's office, and (5) one or two offices for clerical work."

Another architect quite properly suggests the difficulty of answering my questions specifically because of the great variation in types and sizes of hospitals. "In small general hospitals up to 100 bed capacity, the social service is generally limited to one room. As the size of the institution is increased, consultation rooms and waiting spaces are added."

It is obvious that there must be variation. One cannot simply answer an architect's request for "an ideal setup." But after these three decades of experience surely we hospital social workers must have something to say on this subject. And we have.

The letters to the experienced directors of social service departments brought most generous response. The answers about quarters make it clear that many of our medical social workers have been working under great difficulties. The most frequent comment from those whose quarters are inadequate is in regard to the lack of privacy for personal interviews. One who "had no part in planning quarters," although in a new hospital, writes, "we are obliged to hunt for an unoccupied bench in the clinic when we wish to interview a clinic patient. Sometimes we must sit in the corridor outside our office to talk with visitors because the office is too crowded to make good interviewing possible. Our crowded facilities make conference with students difficult."

Another reports six desks for social workers, two tables for students and two for volunteers in an open room, 15 by 20 feet, with no telephone booth.

More cheerful response comes from some of the hospitals that have constructed new buildings in recent years. The directors report that they were consulted by the architects as to their needs and the location of quarters.

From one university hospital word comes: "In each clinic an office had been set aside for a social worker. This office was adjacent to the clinic headquarters room where the clerk and nurse are, and to the examining rooms. It is important to have a central social service office for files, reception of telephone messages when workers are not in their offices and for general headquarters purposes. In addition, individual offices affording privacy must be planned as a part of each individual clinic. To serve patients who are in the wards the office must be so that the worker is accessible to the doctors and visitors."

Social service is at work under difficulties in this not unusual setup.

This director of social service continues: "One practical consideration with which we have had a good deal of experience relates to the telephone. We are now convinced that it is more satisfactory for us to have an independent switchboard than to be on the hospital switchboard, although of course we have intercommunicating lines so that any call to the hospital can be switched to us, and we can call any department in the hospital without going through an outside central."

Possibly the answer that gives an impression of the greatest satisfaction comes from another university hospital that has a staff of 13 social workers. The director reports a central office with a private office for the director in the administrative unit of the hospital near the nursing and dietetic offices. There is a room for interviews associated with each clinic. Many social service departments may well envy her the office for stenographic force and files, a telephone switchboard, a dictation room and a room for students.

Much valuable experience is recorded in these letters, too much for presentation in this article. Many questions are raised and to some extent answered. The time is ripe for their fuller discussion. It is clear that to plan quarters for social service intelligently there must be a clear conception of the function that social service is to perform in the special hospital to be built.

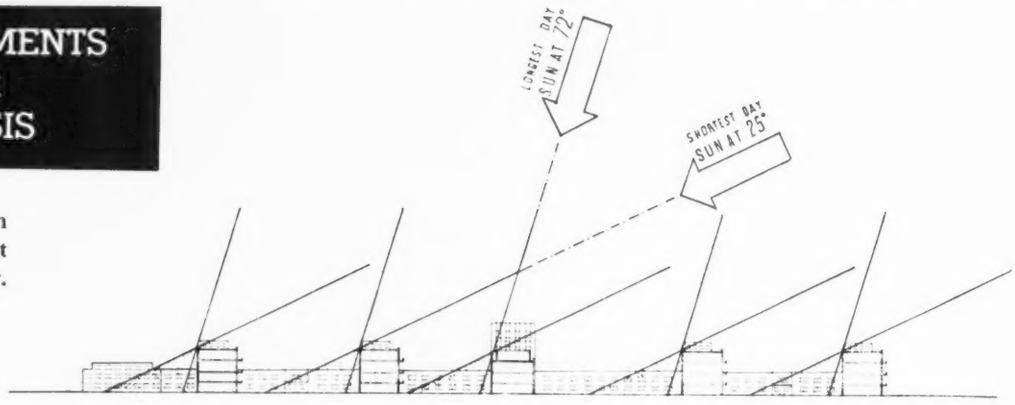
Is the department to serve primarily the clinical service? If so, it must be accessible to clinics and wards. Is it charged with duties in admission of patients? If so, it must be near the admitting office. On all counts, there must be protection for personal interviews with patients. Space must be provided for records and correspondence with the necessary equipment for files and stenographic service.

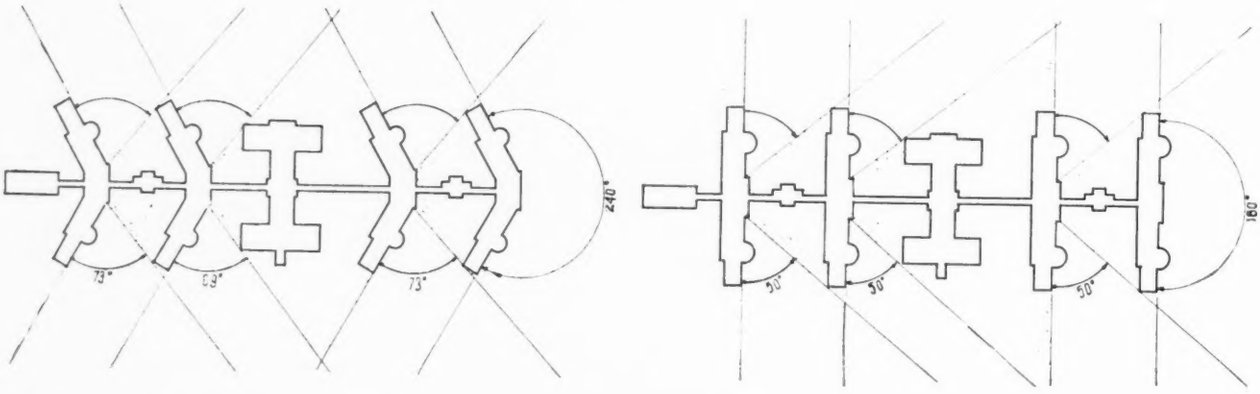
Has the department teaching obligations? If so, there should be space for students. A library and conference room are necessary for a group of workers who are alive to the complicated problems with which the social service department must deal.

This problem of quarters and facilities for social service is not only of concern to architects and social workers. It is pressing hardest of all on the hospital administrator who wishes to have the working conditions of all the many departments of our complicated modern hospital such that each may render service efficiently.

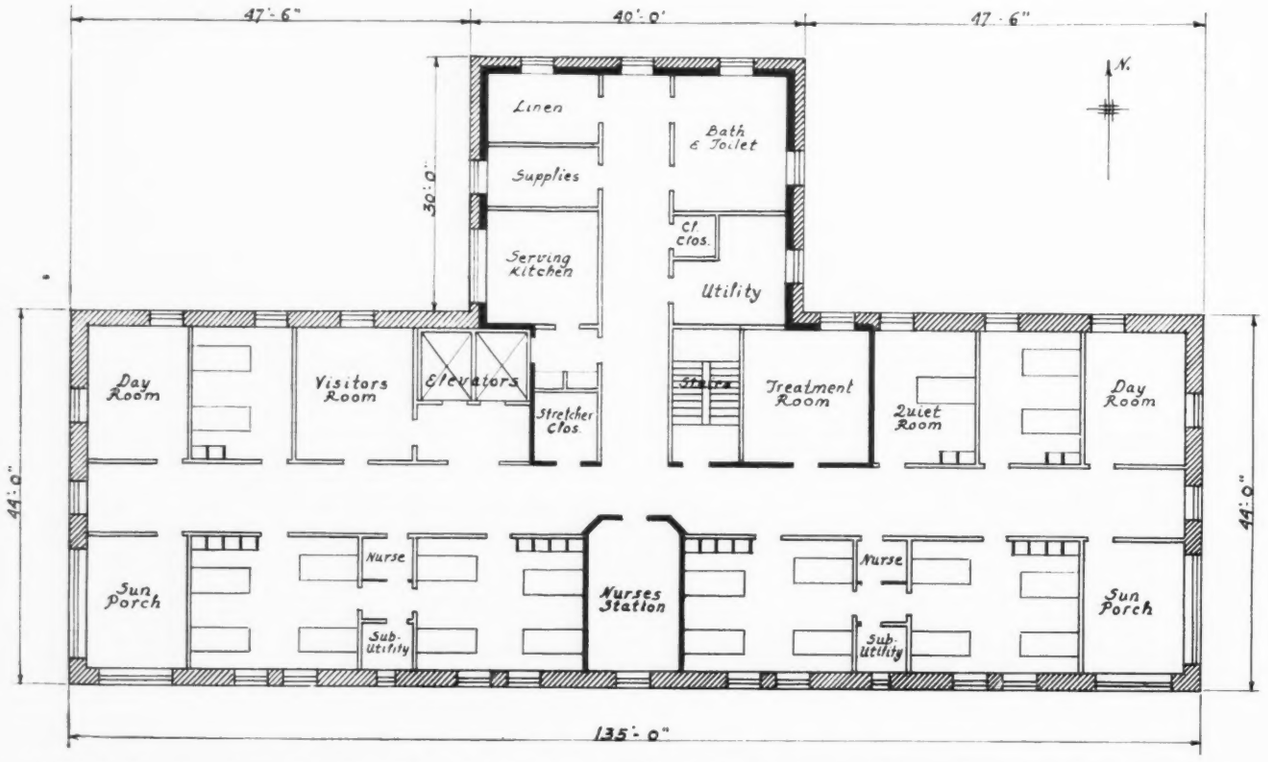
REQUIREMENTS FOR ASEPSIS

Buildings spaced as in this diagram do not cast shadows on each other.





A comparison of two schemes. Left, the building as designed, with wings at an angle; average angle of unobstructed vision, 72 degrees. Right, alternate scheme, with wings perpendicular; average angle of unobstructed vision, 50 degrees. This is the carefully worked out plan for Welfare Island, New York City's long-term hospital development.



Layout of a twenty-one bed hospital unit featuring simplicity in planning, orderly floor traffic and arrangement of nursing unit (indicated by heavy line) from the standpoints of sanitation, ventilation and light and noise elimination.

Infections Challenge Planning

J. J. GOLUB, M.D.

HOW does hospital planning contribute to the maintenance of surgical asepsis and the control of cross-infection? First, it outlines the requirements and guides the hospital authorities in the selection of a salubrious site, followed by consideration of the following aspects:

1. Orientation and Exposure of Buildings. Eleven years ago, Doctor Goldwater asked: "Do we of the present generation wish to go down in history as the artificers of a dark age in hospital planning? . . . Or is it not rather our duty to plan hospitals scientifically and humanely, holding fast to the fundamentals of sunshine and fresh air?"

This warning had its influence on hospital planning. Hospital architects and consultants are alert to the germicidal effects of sun rays and the dilution and displacement of contaminated air by natural and mechanical ventilation. They recommend the installation in suitable places of mechanical air conditioning.

The fullest advantage of the germicidal effects of sun rays and of natural ventilation can be had by determining building heights to avoid their casting shadows upon one another; by orienting buildings to face a park or a wide street and at considerable distance from neighboring tall buildings; by facing the sides of buildings on which wards, rooms, day rooms and balconies are located to the south, southeast or southwest (given in the order of desirability), and by avoiding enclosed and small courts. This will permit the maximum number of hours of sunshine a day and the maximum number of days of sunshine a year.

Doctor Golub is director of the Hospital for Joint Diseases, New York.

Hospitals must be planned so that the occurrence of infection is made extremely difficult, if not impossible.

An example of good orientation are the buildings of the new Welfare Hospital in New York. Goldwater and Rosenfeld exposed the buildings to the south in chevron shape of 30 degrees' deviation. This made possible 240 degrees of sun exposure instead of 180 degrees, which would have resulted from buildings oriented in a straight line.

2. Simplicity of Plan and Orderliness of Traffic. The present day complex hospital can be planned simply. Every conceivable service and department may be included and properly located in a simple plan. Moreover, a clinical or administrative procedure, to be precise and expeditious, should have a simple setting.

Simple planning permits facility of aseptic technics. It visualizes the interior of the hospital from the standpoint of the specific utility and function of each area. It attempts to understand the services to be rendered by hospital departments and the procedures to be carried out by the professional, administrative and domestic personnel. It does away with hidden dirt sources and makes cleanliness easy. It recognizes that faulty traffic can break down defenses and can even carry infection by permitting brushing against sterile material and persons, particularly in the operating suite. Therefore, it provides for orderly traffic between buildings and between and within departments.

A simple plan attempts to avoid contacts, friction, conflict and excessiveness. Consideration includes traffic to and from the observation galleries of the surgical operating rooms, the obstetrical division and isolation and observation wards. It considers the location of wards and rooms, professional and domestic services, areas and passages for visitors to children's wards, to adult wards, to contagious disease units and to the out-patient department and their relations to corridors, stairways, elevators, entrances and exits. It provides suitable and nonconflicting interior passages in relationship to exterior driveways and paths for personnel, visiting staff and visitors.

3. Location, Arrangement and Subdivisions of Wards and Rooms. Hospital planning directed at maintenance of asepsis and the control of cross-infection requires consideration of suitable separation of the areas assigned to the medical and surgical divisions and to the subdivisions within them, such as separate units for dermatology and venereal disease, for obstetrics, for gynecology, for eye, ear, nose and throat and for proctologic services.

In planning areas for these specialties good design provides the essential number of isolation rooms for postoperative, pneumonia and infectious patients. It indicates the types of cubicles suitable for adults and children; when walls between cubicles should be complete, when incomplete; where portable cubicles may be used for infants, and where beds may be safely separated by curtains. It provides flexible facilities for grouping patients according to ages to meet the known problem that infants are highly susceptible to infection and that susceptibility lessens with higher ages.

Sensible planning considers the bed capacity of wards: large wards of 12 beds or more as against small wards of from two to eight beds. The hospital budget must have been shattered when first the practice was introduced of providing a separate bed for each patient. Doctor Goldwater reports that "as late as 1788 each of the beds of the Hôtel Dieu in Paris was intended to hold either two or four patients." Today, deserving importance is attached to area, cubage, height of ceiling and space between beds to meet the hygienic minimum for patients.

The British code, for example, requires that 9 feet be allowed between beds of patients with contagious disease and 144 square feet floor space for each bed. In this country, codes permit beds to be 3 feet apart and a minimum area of 80 square feet or 800 cubic feet for each bed, although 4 feet between beds and 1000 cubic feet for each patient are preferable to lessen droplet borne infection.

In planning for windows and doors, consideration is given to the important matter of cross-ventilation and penetration of sun through windows to beds. The architect considers the placing of beds horizontally to windows. This permits the maximum amount of sunshine to reach each bed, a costly procedure requiring an unusually long building, as compared with placing beds vertically to windows, which cuts down the amount of sunshine.

Ward forms are important. Those with windows on three sides are the most desirable. Deep wards with windows on one side mean that the sun's rays do not reach the beds farthest from windows. In wards for contagious disease patients, consideration is given to exterior entrances as well as to entrances off the interior corridor.

In children's hospitals and children's wards of general hospitals, provision should be made for an observation unit for new admissions to consist of rooms of one and two beds, the beds in double rooms to be separated by complete cubicles. The unit should be complete and independent with its own fixed and movable equipment, instruments and supplies. It should contain a nurses' station, serving kitchen with a dishwashing machine, a milk room, bathing and toilet facilities, a utility room and soiled and clean linen closets.

4. Nursing Unit. Special consideration should be given to the location and subdivisions of a complete nursing unit. A nursing unit divides itself into two groups of rooms. One group consists of the nurses' station (which should permit a wide view of corridors, wards, day room, staircases, elevators, bathing and toilet facilities) and the necessary number of examining and treatment rooms. The other group consists of a utility room, bathing and toilet facilities, linen and supply rooms, linen chutes and a serving kitchen. This second group, which is often referred to by foreign hospital people as the "sanitar" unit, should have its own corridor off the main corridor for purposes of sanitation and quiet.

5. The Surgical Operating Suite. The operating rooms should constitute a separate unit as isolated as possible and practicable. The corridor leading to it should not permit through traffic. A good location is at the end of a wing on an upper story. Large operating theaters are a thing of the past. The operating theater should, however, be of sufficient size to prevent contact between persons and materials. It should be fairly high but not so high that the cleaning of upper parts of walls and ceilings will be difficult. Unnecessary projections, ledges and skylights are to be avoided.

The observation galleries should have separate entrances and should be planned so that observation of surgical areas is reasonably good; at the same time observers should remain outside of the operating room.

Scrub-up rooms should be conveniently located in relation to the operating rooms so as to avoid undue exposure and contact after scrubbing. At the main entrance of the operating suite, there should be special dressing rooms for surgeons, residents and interns and visitors.

Sterilization by means of ultraviolet irradiation is still in the experimental stage. It is said that sterilized air only dilutes the contaminated air, while the patients by coughing, sneezing or even by the act of breathing are constantly adding to the contamination. Provision should be made for separate operating rooms to be used solely for "clean" conditions and others for infected conditions. There should be separate operating rooms for nose, throat and ear surgery and for proctologic surgery.

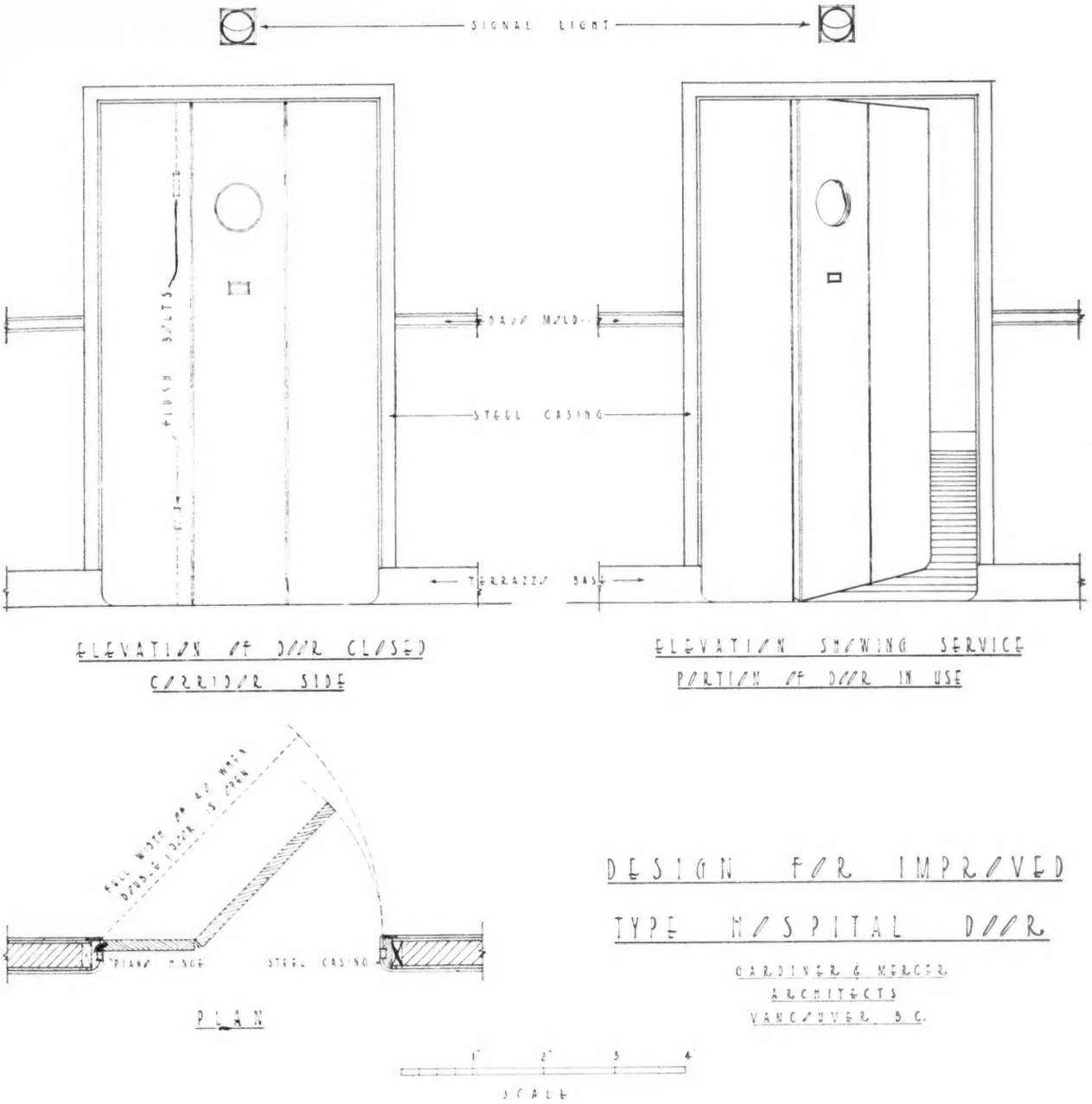
6. The Maternity Department. Should the maternity department be a separate and independent building with its own entrances or a separate and independent unit as part of a building that cares for other patients or merely separated rooms and wards on any floor? Should the birth rooms be on the same floor with surgical operating rooms? Where should cesarean section be performed: in the birth room or in one of the regular surgical operating rooms? Should obstetrics be combined with gynecology as one physical unit and one clinical division of a hospital? Should the maternity department be complete to the extent of having its own professional, administrative and domestic services or should it depend for these on the central services of the hospital?

These questions confront the hospital architect. Experience and overwhelming opinion indicate the preference for a separate and independent building or, at least, a separate and independent unit, say a complete floor or two for maternity patients and newborn infants only, which will permit ready and rigid aseptic nursing technics. This would not necessarily mean independence of central hospital services, such as laboratory, x-ray, pharmacy, kitchen and laundry.

The areas planned should be so flexible as to permit isolation of infected mothers and infants and "clean" mothers with infected infants and "clean" infants of infected mothers. Small wards of two to four beds are advised with a number of single bedrooms for the isolation of mothers. This would permit admission of mothers with infected conditions or with surgical or medical complications.

Four nurseries should be planned for "suspected," infected, premature and normal infants. The first two should be further subdivided partly or wholly into single, completely walled cubicles for isolation of individual infants. All should have observation windows to corridors. Provision should be made for heating nurseries during the entire year. An isolation unit should have its own bath and toilet and utility room. The milk room should be separated from the serving kitchen.

There should be enough single labor rooms so that isolation of "suspected" or infected mothers could be instituted in the first stage of labor. There should be provided a birth room for the delivery of "suspected" or infected mothers. The



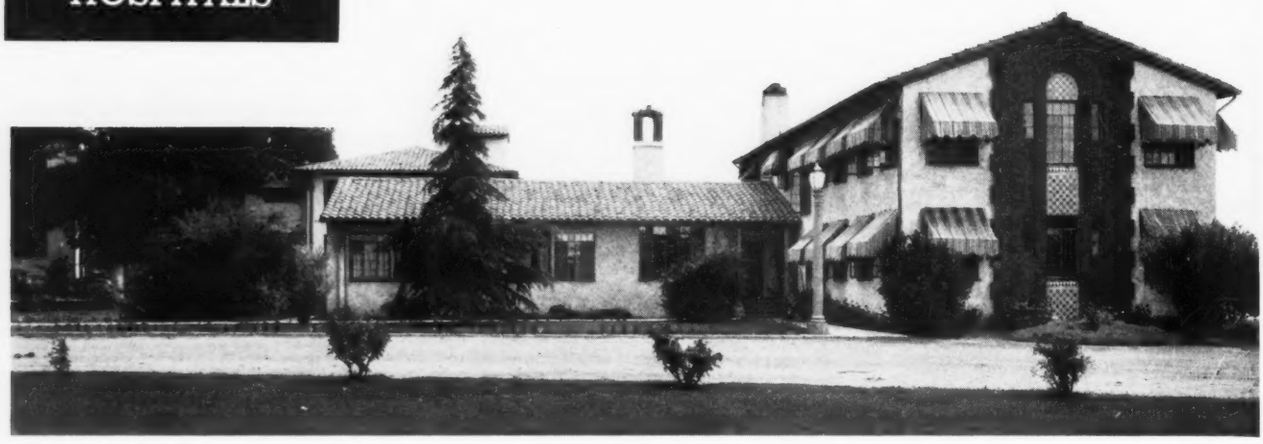
"infected" birth room should be as far away as possible from the "clean" birth room with an independent entrance off the corridor. The general principles applicable to the planning of surgical operating rooms and observation balconies also apply to the planning of birth rooms. A separate admitting office and waiting rooms should be provided.

7. The Out-Patient Department. Separate clinic areas for the usual clinical divisions should be provided. Sections assigned to dermatology, prenatal patients, pediatrics, venereal diseases, gynecology and general surgery should not be used for other purposes. Provisions should be made for isolating ambulatory patients suspected of having communicable disease. They should include a few separate, complete cubicles so that a suspect of whooping cough, for example, would be separated from one with diphtheria until removed to a contagious disease hospital. The isolation unit should be complete with a utility room, washroom and toilet. There should be planned and specified a generous number of wash basins in each clinic area convenient for physicians and nurses to wash their hands after the examination of of each patient.

Design for Door

As suggested by Sister Gertrude, procurator of St. Paul's Hospital, Vancouver, B.C., Gardiner and Mercer, Vancouver architects, have designed the new hospital door shown above. Wide doors are necessary for removing the patient only. In this door, the narrower service portion is commonly used, thus affording greater privacy. The use of piano hinges between the two sections eliminates the crack. When opened to its full width, the door measures 4 feet.

TUBERCULOSIS HOSPITALS



Sound Planning

By RUSSELL

TUBERCULOSIS hospitals, though limited to the care of only one disease, are as involved as general hospitals. Data such as these that will be given for a county institution may be used for a voluntary or proprietary tuberculosis hospital, if minor adjustments are made.

The responsibilities shouldered by those who must plan a hospital cannot be lessened, but the work involved can be simplified and more satisfactory ultimate results obtained if a thorough study of conditions is made before pictures or plans are cast upon paper. At the earliest stage it is important for the medical, administrative and architectural staffs to become a collaborating body.

Modern therapeutic measures employed in the treatment of tuberculosis and an increasing desire by the public for further scientific control of the disease are major influences in planning such an institution. Requirements essential to the needs of the medical staff have so narrowed the difference between the tuberculosis and the general hospital that general hospital planning technic and details for treatment facilities suit the corresponding needs in the tuberculosis institution. The required changes can be limited to modifications in sizes and locations.

The primary step in planning is to make an analysis of the immediate needs, general trends and available resources.

At this stage it is necessary only to approximate the complement of the institution, segregated into number of patients; number of medical staff, including nurses and technicians, and number of administrative requirements.

Is the institution to be isolated and self-sufficient or is it an element of a major institution? Will its service care for all tuberculous cases in the district or will there be a planned distribution of cases between this and other tuberculosis institutions? Is the institution to be one element in a group of institutions functioning as a part of a general development? With these determinants known, a general plan arrangement can be made.

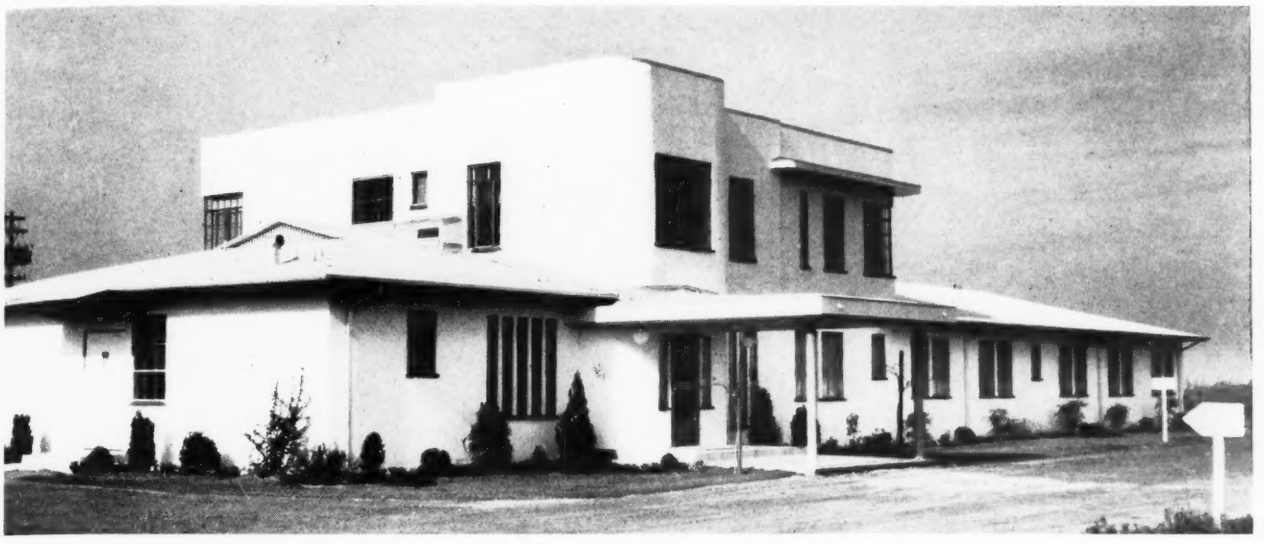
The available budget for the project should be estimated and segregated for furnishings, equipment and building. This figure known, a conception of quality standards is estimable. By combining these data the architect can formulate an understanding of the respective limits within which the project must remain and can note any disparity between requirements and resources.

The facilities for housing the patients in a tuberculosis institution are qualitatively different from corresponding requirements in a general hospital. A larger percentage of patients may be housed in wards in the tuberculosis hospital and private rooms may be smaller since tuberculous patients spend a great part of the time outdoors. The facilities for the various treatment areas, such as surgery, x-ray and administration, should be similar to those of a general hospital but can be materially smaller.

Housing the staff is subject to standard practices and can be best treated independently. However, the influences of the medical and administrative staff should be recognized when they are directly reflected in the major plan since such units as food preparation centers and offices must provide facilities for staff as well as patients.

It can be estimated that each patient for his housing occupies one-fourth of the gross area of the institution (except the housing areas noted above for staff and help). Thus, on an allowance of 100 square feet per patient, 400 square feet of gross area is needed. A 100 bed institution requires 40,000 square feet on such an estimate. If from 50 cents to 70 cents per cubic foot is the range for an adequately appointed

The author is an architect located at Modesto, Calif.



for Sanatoriums

GUERNE deLAPPE

and well-built general hospital, a cost of from 40 to 60 cents per cubic foot will be adequate for a tuberculosis hospital. While such estimates are not final, they will serve in deciding whether to proceed or to readjust the program.

Paralleling the report to be made by the medical staff, in which the facilities adequate to meet its needs are set forth, the architect's report should include the following information: (a) conditions of the soil at the site for foundations and gardening; (b) orientation to utilize wind and sun; (c) grades and slopes affecting circulation (single story preferred); (d) restrictions that may limit future expansion; (e) isolation and control against intrusion of outsiders, while affording ample outdoor use for benefit of patients; (f) water supply and sewage disposal, and (g) road accessibility, without encroaching upon or passing too near zones appropriated for patient use.

Housing elements may be arranged so that cases are grouped on the bases of degree of infection and extent of treatment required.

In choosing the site for the tuberculosis hospital several factors must be carefully considered. Locating the hospital at a considerable distance from centers of population has certain disadvantages. Though land cost may be low, inaccessibility involves extra costs in construction as well as higher permanent operating expense through loss of time and costs of travel. There is the further handicap in being unable to have as many visiting physicians on the staff as desired. Such isolation is no longer advocated. In some cases it may even prove profitable to abandon an extremely isolated institution and build a modern hospital on a convenient site.

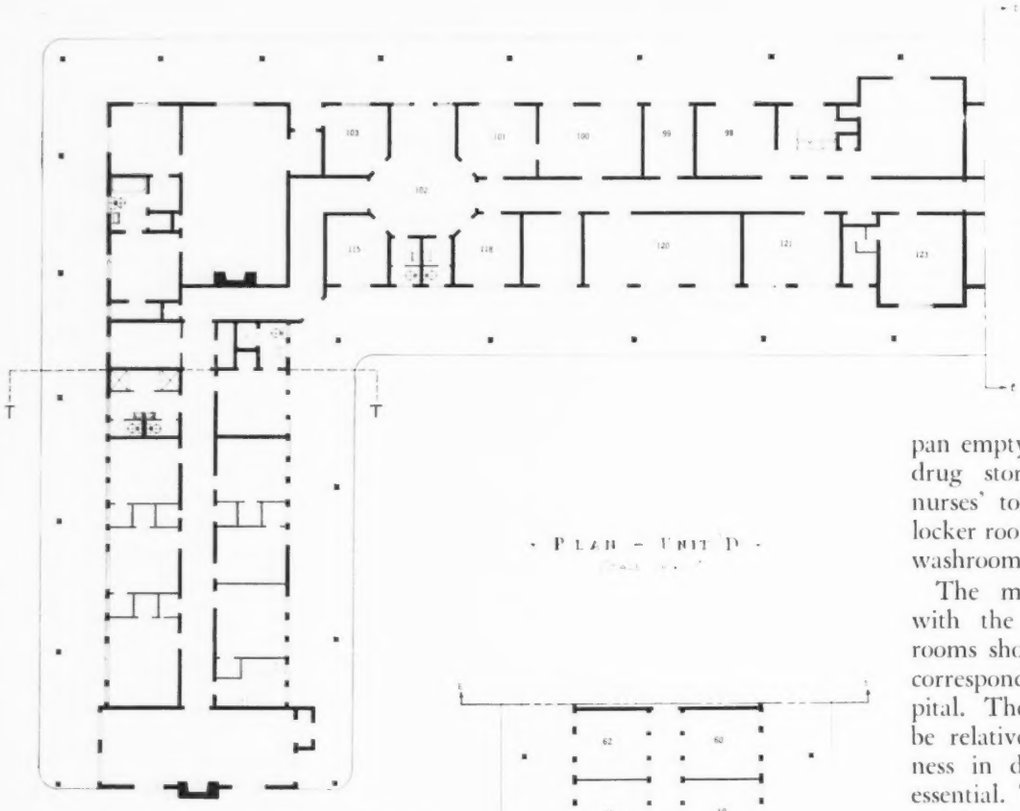
When the choice rests between adding to an old, markedly isolated institution and a new institution ideally located, the problem is one of balancing the long range or social cost against the immediate cost. Assuming the continued steady rate of decline in the case frequency of tuberculosis, it is apparent that many institutions will be abandoned as tuberculosis hospitals. The modern institution in a readily accessible location can be inexpensively converted to other uses while the remote institution can be converted to other uses only at great cost.

The trend toward increasing the general hospital character of the tuberculosis hospital in its treatment and surgical elements is so marked as to justify the fullest consideration. It suggests the advisability of integrating the tuberculosis institution with other social institutions in a group development. With adequate separation and with sufficient provision for institutional self-sufficiency to satisfy the medical staff, yet with a reasonable proximity to the other institutions, the group development has definite advantages. The general hospital facilities of the tuberculosis hospital could be made available to the other institutions of the group.

The tuberculosis hospital can be separated logically into three elements, when considered functionally: patient housing, general treatment and general administration.

The patients' housing area (room or ward) should be contiguous to a semisheltered porch area or directly accessible to a solarium. Housing elements should be separated to expedite segregation of patients on a basis of sex and to separate children from adult patients. Subdivision of housing areas should provide a percentage of private rooms with remaining areas to be subdivided into cubicles of one to four beds.

Housing elements should be arranged in such a manner that a

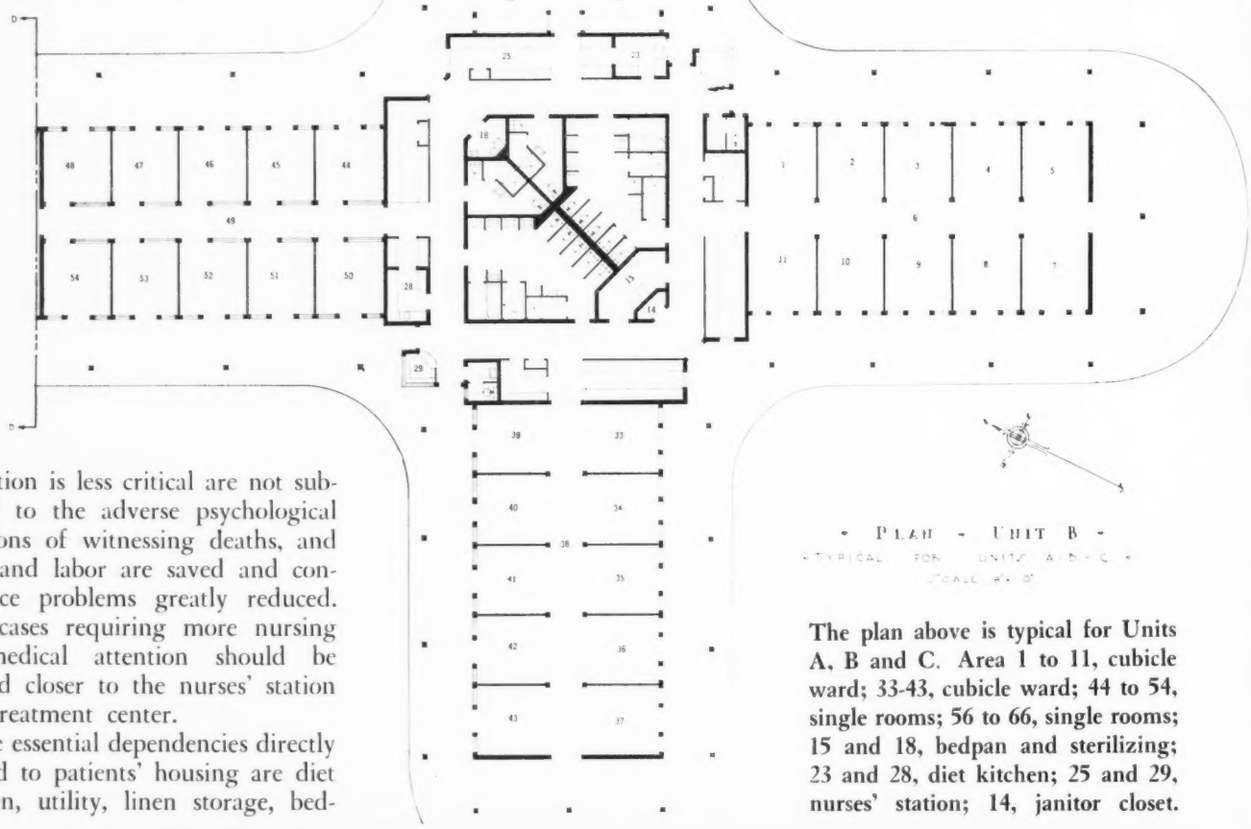


Schedule of rooms for Unit D: 102, lobby; 103, administration office; 115, cosmetology; 118, head nurse; 101, consultation; 100, examination; 99, laboratory; 98, major surgery; 123, x-ray; 120, 121, treatment; T-T, nurses' accommodations.

grouping of cases can be made on the basis of the degree of infection and the extent of treatment required. This enables the movement of patients to more private quarters when they are in a critical condition. The results are twofold: patients whose condition is less critical are not subjected to the adverse psychological reactions of witnessing deaths, and time and labor are saved and conveyance problems greatly reduced. The cases requiring more nursing or medical attention should be housed closer to the nurses' station and treatment center.

The essential dependencies directly related to patients' housing are diet kitchen, utility, linen storage, bedpan emptying and sterilizing rooms, drug storage, nurses' station and nurses' toilet room, general patient locker room, patients' bath, toilet and washrooms and stretcher room.

The major and minor surgery with the scrub-up and sterilizing rooms should be patterned after the corresponding units of a general hospital. Their areas and number can be relatively reduced but completeness in detail and appointment is essential. The same recommendation can be made for the x-ray department, including the darkroom. The minor surgery can be used for doing dental work. Laboratory facilities adequate for one technician in his work in pathology, bacteriology and biochemistry should be provided.



The plan above is typical for Units A, B and C. Area 1 to 11, cubicle ward; 33-43, cubicle ward; 44 to 54, single rooms; 56 to 66, single rooms; 15 and 18, bedpan and sterilizing; 23 and 28, diet kitchen; 25 and 29, nurses' station; 14, janitor closet.

The resident physician needs a private study and consultation room as well as an examination room. The duties of the head nurse justify a private office.

Private office facilities for the administration, while large enough to allow for preparing and cataloging records and carrying on the non-medical activities, can be greatly simplified over the corresponding elements of the general hospital. Their separate housing, however, is advised.

Food preparation for the entire institution can be done in a central kitchen. If the policy is to have all meals taken to the patient, the space in the kitchen for tray makeup should be appreciably increased. The storage of foodstuffs becomes a problem in direct proportion to the accessibility of the institution to delivery centers. The minimum demands, however, justify following the standard practice of having completely refrigerated and separate walk-in boxes for storage of meats and vegetables with a separate icebox for fish.

Dietary problems do not impose any special planning procedures, other than having the kitchen layout one that is modern in appointments with a working area in standard proportion to the dining load. Dishwashing by a complete sterilizing process providing separate equipment for patients' dishes is essential.

The dining facilities, if based upon 100 per cent tray service to all patients, leave only two groups, staff and help, to be accommodated. Since the cafeteria system saves area, reduces help and further simplifies the problem of circulation, a slight adjustment of the plan may be made, utilizing a partial partition to develop two alcoves, one for the staff and the other for the help.

From experience with the "tent type" of housing, it has been found that a building plan and a selection of materials can be used that do not require as heavy an investment for patient housing as is required in general hospital design. To simplify circulation problems (a definite handicap with the "tent type" of scheme), it is preferable to use the composite plan scheme, by placing all the elements—housing, administration and treatment — under one roof. The help and staff should be housed in separate structures. Because of fire hazards in the use of frame materials, the plan should be studied with the object of introducing firestop separations. If it is possible to make these introductions so that each functional element is isolated, the added advantage is gained of more effectively confining the sounds originating in one element within the limits of that element. These fire separation partitions should extend in an unbroken plane from ground beyond roof.

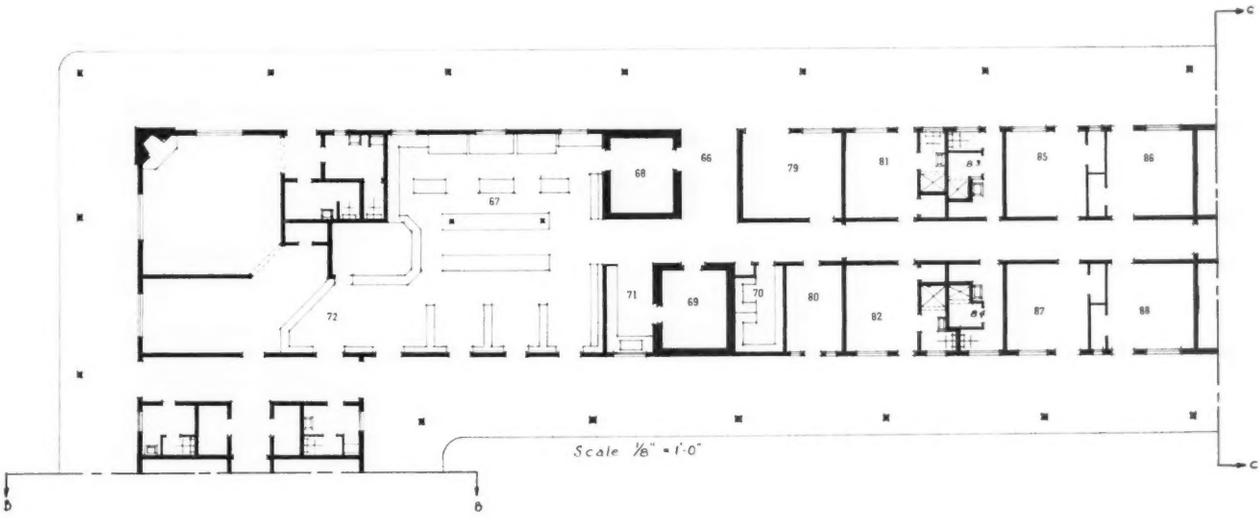
Involved heating apparatus that has definite value in other types of institutions is not vital to the tuberculosis institution. Except for those single rooms used for critical cases and the treatment elements, such as the surgery, where more positive thermal control is essential, standard equipment is adequate. For special rooms use local heating units.

The extremes of heat can be tempered by introducing roof insulation. Economical and effective blanket or reflector type of materials is readily obtained for this purpose.

The project represented on the plans shown is for Stanislaus County in California. The population is 60,000. The site is the foothills of the Coast Range Mountains, 22 miles from the nearest city. The terrain is broken into several building sites. An average distance of a quarter of a mile air line separates these sites.

The tuberculosis institution is proposed for the second development. It will occupy a knoll at an altitude of 1200 feet with approximately 6 acres in a triangular building site. The slope of the land is gradual, permitting a single story development. On the west, the site is bounded by a sharp decline and the other two sides of the triangle are bounded by declines that fall 200 feet to creeks converging toward the north. The local isolation of the tuberculosis unit site is established by these effective barriers.

The institution, when completed, as based upon bids recently received for the first units, will cost approximately $3 per square foot.



Schedule for unit E, above; 66, receiving supplies; 67, kitchen; 68, 69, meat and vegetable walk-ins; 70, dry food storage; 71, vegetable preparation; 72, cafeteria; 79, machinery and tool room; 80, laundry storage; 81, chief cook; 82, plant engineer; 85 to 88, bedrooms.

MENTAL DISEASE HOSPITALS

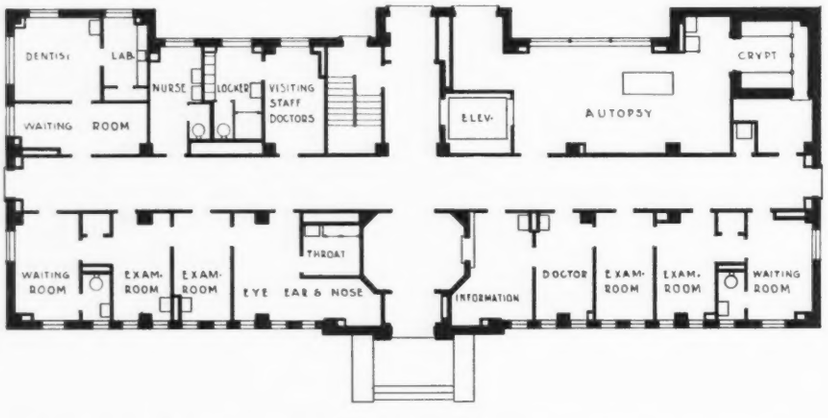
FOR ACUTELY ILL, FULTON STATE HOSPITAL

More Beds for

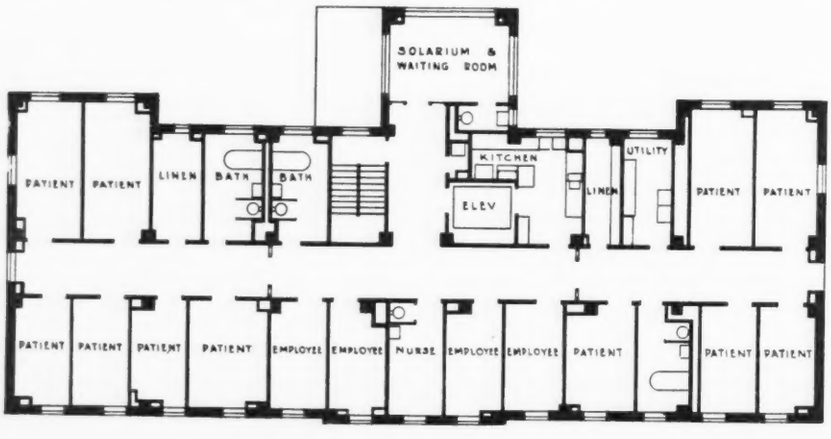
THE careful preliminary study that preceded the erection of new facilities for the four state mental hospitals that are a part of the Missouri program of rehabilitation and extension of eleemosynary and penal institutions was emphasized in the introductory article of this series, published last month.

Extensions have been provided for the state hospitals at Fulton, St. Joseph, Nevada and Farmington.

New hospital buildings for the acutely ill have been built at both Fulton and Farmington, Mo. The existing hospital building at the St. Joseph institution was comparatively new and modern, and it was thought that the one at Nevada would lend itself to enlargement and completion without rebuilding. At Fulton the new hospital was built as an independent building, five stories in height; at Farmington it was connected directly with the existing infirmary building, which was enlarged.

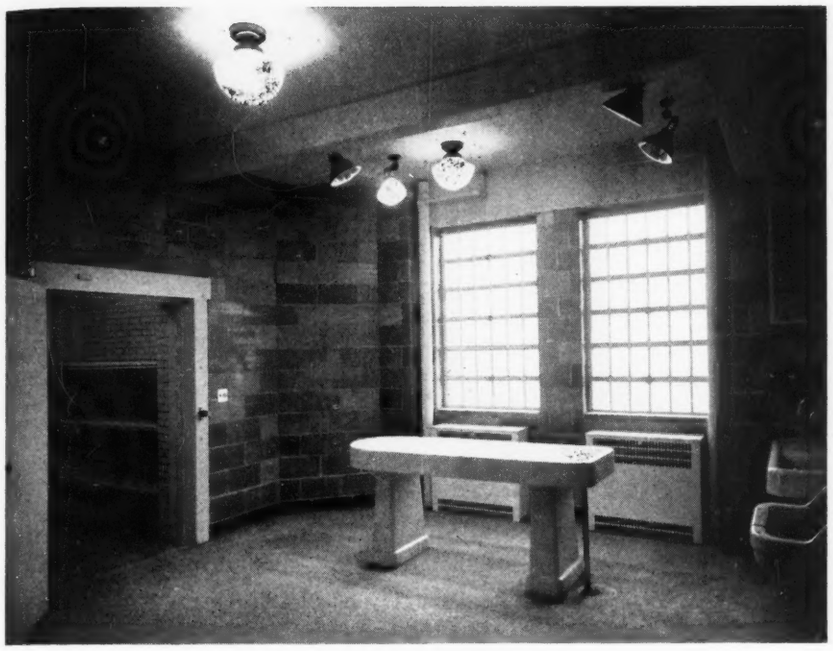


Floor plan of the first (above) and second and third (below) of the hospital building for the acutely ill, Fulton State Hospital, Fulton, Mo.



Typical floor plans of the Fulton hospital are shown. It will be noted that the ambulance entrance and door from the autopsy room both open to the same porte-cochere so that the ambulance is sheltered and concealed whether bringing a patient into the hospital or taking out a body. Moreover, the area that forms the porte-cochere is continued in the upper stories to form sun and visitors' porches. All of the general offices and examining rooms, as well as the autopsy and crypt rooms, are on the first floor. The crypt is an insulated and refrigerated room lined with white enameled brick and having six glass shelves for holding bodies, three on each side of the room. The coil space is separated from the rest of the room by a marble partition and access to this space

The author was supervising architect of the Bipartisan Advisory Board, Missouri State Building Commission.



AUTOPSY ROOM, ST. JOSEPH STATE HOSPITAL

Mental Patients

L. R. BOWEN

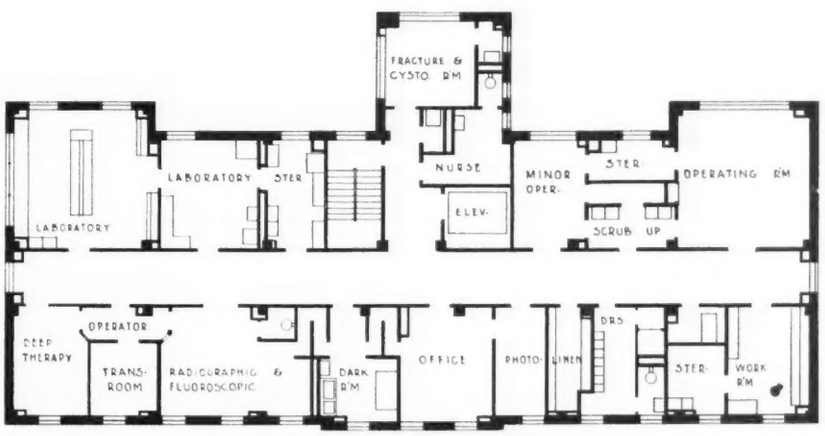
is had from a corridor, making it unnecessary for the maintenance man to enter the autopsy or crypt rooms. As the glass shelves are non-absorptive and are easily cleaned, it is thought that this arrangement is much superior from the standpoint of cleanliness and freedom from odors to individual metal trays pulled out from a refrigerated space.

The second and third floors are for men and women patients, respectively, and on each floor there are 12 beds in two bed wards and nine beds in single rooms. On each of these floors four single rooms have been provided for employe patients. These rooms are located at the center and the corridor serving them is partitioned off from the patients' corridor. All corridors have windows at the ends to supply light and air.

Expansion and modernization are either in work or contemplated in the mental disease hospitals of almost every state in the Union.

The operating section, sterilizing section, workroom, laboratories and radiographic department are on the fourth floor. Preference in the choice of north light was given to the laboratory over the operating rooms where dependence is placed wholly on the artificial operating room light. It was originally thought that, in view of the extensive radiographic facilities provided in the psychiatric clinic building, the x-ray facilities in this building might be confined to a radiographic and fluoroscopic room. The later decision to provide for cancer patients made it necessary to add a room for deep therapy.

That tradition of having complete radiographic facilities in the hospital building, together with the desire of the technicians employed in the existing hospital to have new equipment in the new hospital, influenced the decision to make complete provision for its installation there. The cystoscopic and fracture facilities were combined, however, in the space which on the lower floors had been utilized for a sun room.



Plans of fourth and fifth floors for acutely ill, Fulton State Hospital.

The fifth floor was laid out for the hospitalization of cancer patients from the entire state. Nursing sections for men and women were planned, each with a 16 bed ward divided into four cubicles. Four single rooms also were provided.

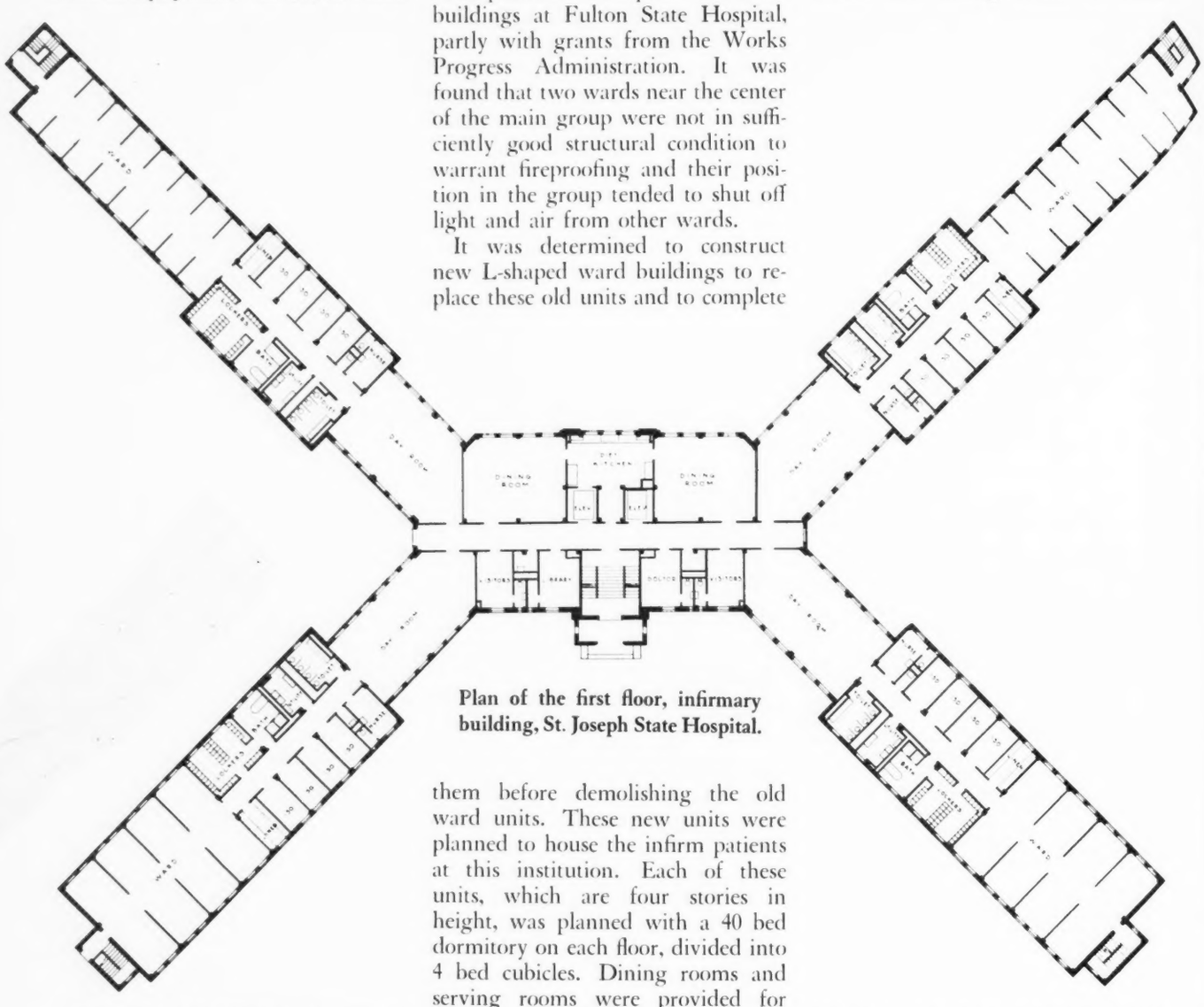
The total capacity of this hospital is 78 beds. Its cost, including all built-in equipment, was $1900 a bed.

Provisions for the Farmington institution were similar to those for the Fulton hospital, except for the omission of deep therapy and rooms for cancer patients.

In determining the capacity of the hospital buildings for acute cases bed space for 2½ per cent of the normal capacity of the institution was considered sufficient, in view of the complete provision being made elsewhere for infirm patients and the close connection of the hospital with the infirmary units. Accommodations are divided equally between male and female patients.

None of the state hospitals had fireproof buildings for infirm patients. At two of the state hospitals, Fulton and Farmington, separate fireproof buildings had been provided for the tuberculous. It had been planned to fireproof the ward buildings at Fulton State Hospital, partly with grants from the Works Progress Administration. It was found that two wards near the center of the main group were not in sufficiently good structural condition to warrant fireproofing and their position in the group tended to shut off light and air from other wards.

It was determined to construct new L-shaped ward buildings to replace these old units and to complete



Plan of the first floor, infirmary building, St. Joseph State Hospital.

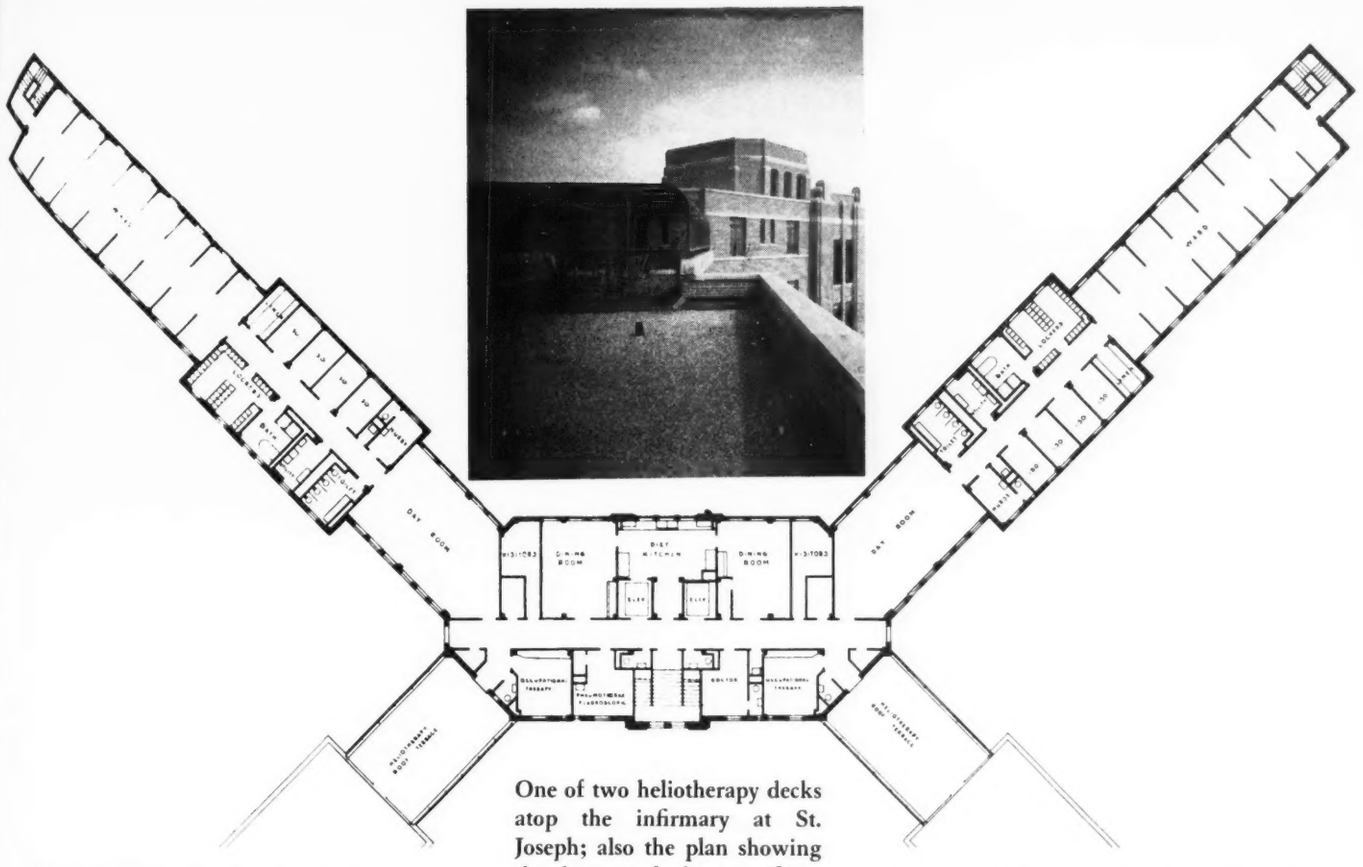
them before demolishing the old ward units. These new units were planned to house the infirm patients at this institution. Each of these units, which are four stories in height, was planned with a 40 bed dormitory on each floor, divided into 4 bed cubicles. Dining rooms and serving rooms were provided for these units, served by elevators extending from the basement, whence food is brought from the main kitchen.

Elevators for these new units, which were the only ones in this ward group, opened on one side into the serving rooms and on the other side into corridors, to be used both for passengers and service. As the wards adjoining the new wards are used for disturbed patients, the new serving rooms were planned to supply food to patients in the disturbed wards as well, inasmuch as they and the infirm patients would be the only ones not using the central cafeteria.

The day rooms for these units, by reason of their position in the group, form passageways between the wards to which they connect. The day rooms and dining rooms of these and of all the other infirmary buildings were designed with the idea that 75 per cent of all the infirm patients would be able to go to the dining rooms and to the day rooms.

The cost of these units was a little less than $1000 per bed.

The old infirmary building at Farmington is two stories in height. It was decided that this building should be fireproofed with funds obtained in part from the W.P.A. To achieve the required capacity



One of two heliotherapy decks atop the infirmary at St. Joseph; also the plan showing the layout of the top floor.

for infirm patients, it was necessary to add 88 beds. This was accomplished by constructing 2 two story wings in connection with the new hospital building previously described. Each of these wings contains a dormitory with 10 two bed cubicles (two beds to the width of the room), a day room, dining room and a utility section as described last month for the psychiatric clinic. The serving rooms for the new dining rooms also are planned to act as serving rooms for the dining rooms of the old infirmary.

At the St. Joseph and Nevada hospitals it became necessary to construct new infirmary buildings. These buildings are of similar design. Floor plans for the infirmary at St. Joseph are shown.

Both of these buildings face toward the east. The patients' wings on the east sides of these infirmaries were made two beds deep and were extended one story above those on the west side to provide for the housing of tuberculous patients. The wings on the east side of the St. Joseph infirmary each have dormitories with 16 two bed cubicles, eight on each side, and four single bedrooms. Those on the west side have 8 four bed cubicles, four on each side, and four single bedrooms. In the three and one-half stories of this building, therefore, provision is made for 504 beds.

On each floor there are a single serving room to serve the four wards and a separate dining room for each two wards located at the ends of the serving room. Two elevators in each of these buildings open alternately into the serving rooms and into the central corridor, to be used for passengers and food trucks. The serving rooms, dining rooms, visitors' rooms and doctors' rooms and offices are located in the central section of each of these buildings.

The top or fourth floor of the infirmary at St. Joseph has bed space for 72 tuberculous patients, 36 of each sex, arranged in two beds to the cubicle and only two beds to the width of the room. A large window is adjacent to each two beds in every cubicle. Heliotherapy decks, enclosed above the brick parapet walls by iron guards, are provided at the fourth stories and extend over the sections which, in the lower stories, are occupied by the wider wards.

Rooms for occupational therapy and pneumothorax operations and radiographic rooms are provided in the tuberculosis sections, in addition to the usual visitors' and doctors' rooms planned for the other stories. Three per cent of the normal capacity of the St. Joseph hospital, or 72 beds, and 3 per cent of the normal capacity of the Nevada hospital, or 48 beds, are provided for in the top stories of these infirmary buildings for the tuberculous. Twenty per cent of the normal capacity in all cases is intended for infirm patients.

As there was no autopsy room or morgue in the hospital building at St. Joseph, these facilities were included in the ground story of the new infirmary building at that institution.

Food is brought to the serving rooms on the different floors of these buildings through the pedestrian tunnel, which in each case connects with a special kitchen.

The cost of each of these infirmary buildings was about $1000 per bed.

At the three Kirkbride type of institutions, *i.e.* Fulton, St. Joseph and Nevada, it was thought that adequate provision could be made for the chronic disturbed by fireproofing the wards in which they were housed and installing the necessary hydrotherapy equipment.

LABORATORY

Right: Laboratory equipment at the Gillette State Hospital is ample, because the period of residence in an orthopedic hospital is usually longer than in a general hospital and this necessitates additional routine laboratory work. Below: Desk and files in one corner of the laboratory where records are filed. Gillette Hospital has an average population of 250.

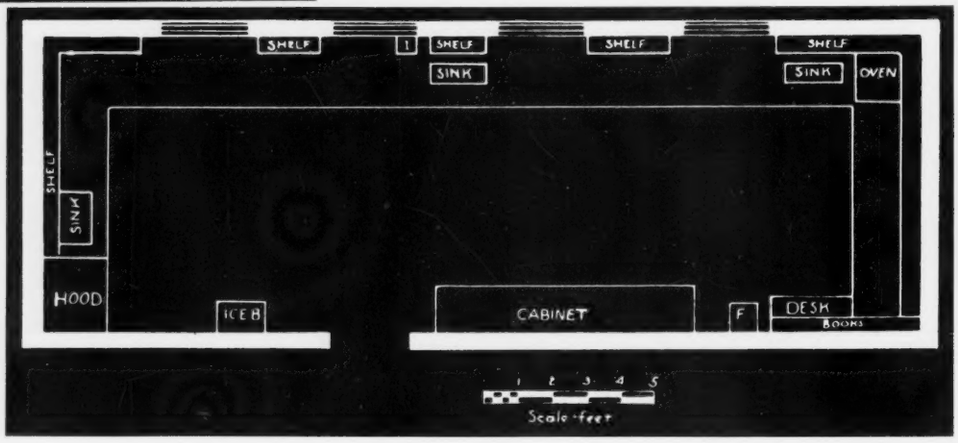
Orthopedic Routine

THE laboratory at Gillette State Hospital for Crippled Children, St. Paul, Minn., has been developed into a useful and well-equipped unit of the hospital.

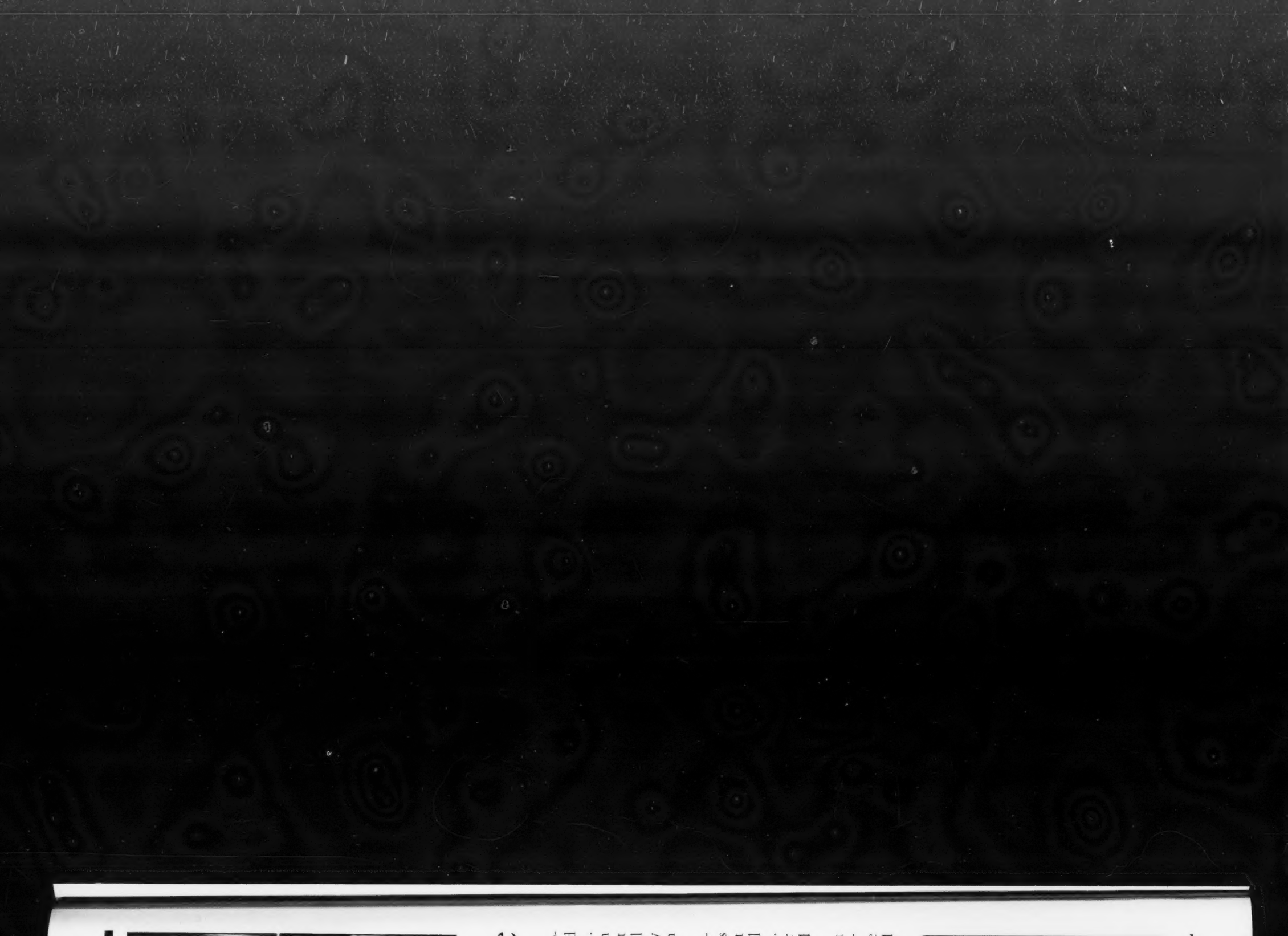
On admission to the hospital, each child is given urine and blood examinations. A complete blood test includes hemoglobin, red, white and differential cell counts, grouping and bleeding and clotting time. Every month during his residence a urinalysis and hemoglobin determination are made for each patient.

Before any operation, during which a general anesthetic is to be given, the patient must have a urinalysis and a complete blood count, if a blood count has not been done within the month, or a white and differential cell count, if these have not been made within the week. Patients are cross-matched for transfusion before major surgery is performed and urinalyses are done on all postoperative cases.

All of the children have eye, ear, nose and throat care. Here again the laboratory is called upon for bleeding and clotting time and hemoglobin tests before tonsillectomies as well as the usual routine blood and urine examinations before surgery on eyes or ears.



Right: Floor plan of the laboratory, which is located on the ground floor of the operating wing. It is well lighted by four large windows and by drop ceiling lights. The room is arranged in sections for the various phases of work performed: urinalysis, blood counting, bacteriology, blood chemistry and record filing.



Sensible Hiring

BERTHA E. BEECHER

Taking the time to study the qualifications of all prospective employes before hiring them saves the hospital time, money and trouble in the end

IN AN attempt to select proper personnel, the employer is confronted with two outstanding groups: (1) the unemployed, unemployable floaters who, if employed, would not be dependable and who would contribute to decreased efficiency and increased labor turnover; (2) the group honestly seeking employment and worthy of every consideration.

It is the duty of the personnel officer carefully to separate the first from the second group and to place at the disposal of the institution desirable and efficient workers.

The sources of applicants are varied and many. Promotions and transfers within the organization always should be considered first when filling a vacancy. The hope for advancement will contribute largely to the efficiency and happiness of an employe. The deadly monotony of a job may undermine the morale of any individual unless he can see ahead the possibility of greater achievement.

Promotions may mean one or all of the following: (1) an increased wage rate, (2) increased responsibility, (3) increased authority and (4) change of title.

A transfer is usually the shifting of a worker from one job to another or from one department to another; it does not necessarily mean a promotion. However, when a desirable employe is a misfit in a department or desires a change, he should be carefully considered when selecting workers for a given job.

From the standpoint of the institution, the prospective employe sent by a friend who is already a satisfied employe usually may be considered a potentially permanent worker. Through the influence of a group of satisfied employes, friends and relatives naturally gravitate to the same place of employment. Other sources of labor supply are employment agencies, training schools, churches, clubs, Y.W.C.A. and Y.M.C.A.

The author is assistant to the superintendent, Christ Hospital, Cincinnati.

The application blank should be simple and comprehensive. A blank requiring too much detailed information confuses the applicant (especially one in the lower salary brackets) and makes him nervous and apprehensive. Great care should be taken in setting up this blank because an applicant's ability to fill out a blank may be an index to his ability to fill the position for which he is applying. However, an interviewer or clerk should be close at hand to make a careful check of this information in the presence of the applicant. This additional contact often reveals other valuable data that will help the employer in making a decision.

The accompanying application blank, which is the product of frequent revisions, contains all the initial information necessary for intelligent and successful selection of employes.

The question, "What do I expect of this applicant as an employe?" should be constantly in the mind of the interviewer. Not only is the question answered by a careful review of the specifications for the particular job but by other observations.

For instance, the type of hand is often an index to the ability of an applicant to do a certain type of work. Height and weight may interfere with the performance of certain duties. If the job includes contact with many people and the applicant appears nervous, how will his approach affect the public?

These and many similar questions must be answered before the interviewer can feel assured that he wishes to recommend the applicant for employment.

An evaluation placed on the back of the application blank by the interviewer immediately following the departure of the applicant will be invaluable when a new employe is being sought. This evaluation by the interviewer should note general appearance, apparent mental caliber, degree of interest, physical type and general impression.

If an applicant is obviously undesirable and the interviewer is at once aware that he would never be employed by the organization, it is not fair to individual or institution to give him encouragement about future employment. The applicant should be treated with courtesy and understanding, but it is far better to say, "I am sorry, we do not have anything for you" than to hold out a false hope.

You ask, "How are applicants affected by this extreme care in the selection of employes?" No doubt the job he is seeking takes on a new importance, and a deeper appreciation and a greater feeling of security are the natural results if he obtains the appointment. Careless employment methods invite haphazard work and tend to increase the employe's feeling of insecurity and doubt. The insecure worker cannot render satisfactory and efficient service.

The head of a department finds absences, because of illness and vacations, and unexpected resignations one of his most time consuming problems. A haphazard way of filling these vacancies is necessarily followed by much grief. The use of the trial and error method in obtaining employes is to be deplored.

While vacancies in hospitals may not be filled in exactly the fashion I

THE CHRIST HOSPITAL
Personnel Department

Application for Employment

Date.....

Name..... Telephone.....
Last Name First Name Middle Name

Present Address.....

Previous Address..... Religion.....

Date of Birth: Place of
Mo.....Day.....Year.....Birth:.....Height.....Weight.....Color.....

Do you have any physical handicaps?.....

Married.....Single.....Dependents: Children.....Others.....

In case of Accident
Notify..... Address..... Tel.....
Name Relation

Position Desired { First Choice.....
Second Choice.....

Were you ever in our employ?..... If so, in what department?..... When did you leave?.....

Are you acquainted with anyone employed here?..... Relative?.....

Education: Grammar School.....years. High School.....years

College..... Degree..... Other training.....

Affiliation with professional organization.....

Former Employers	*Address*	*Type of Work*	*How Long Emp.*

Give names and addresses of two persons, not relatives or former employers, who have known you for more than a year and can vouch for your honesty, character and habits. If possible give landlord's, pastor's or a tradesman's name.

Name	*Address*	*Telephone*	*KnownHowLong*

I agree to submit to the required physical examination before employment.

....
Witness Signature of Applicant

Form A-50-1938

heard described recently, the results are probably the same. At the office of a large concern, a group of men gathered each morning seeking employment. According to the head of one of the departments, the accepted method of selection was for a department head in need of an employe to look over the crowd, select the man whose appearance suited him best and put him to work. Interviews, physical examinations and references were ignored with the following results: high labor turnover, decreased efficiency, lowered morale, increased expense and loss of output.

While it is generally agreed that references have a doubtful value because obviously an applicant would give the names of those who appear friendly to him, there is an increasing consciousness on the part of the public that the interest of all is best served by stating facts when assured that this information will be held as confidential. Therefore, the best references are obtained when a prospective employer corresponds directly with a previous employer.

Not only is the social, educational and work history important in the selection of employes, but the physical history must also be obtained. Unless the physical history is satisfactory other qualifications will have little value. The employment of new personnel is expensive and efficiency in the hospital is usually in inverse ratio to the percentage of labor turnover. Definite health standards should be a prerequisite of employment.

The chief reasons for these examinations are: (1) to aid in the selection of physically qualified employes; (2) to protect the worker from engaging in a type of work for which he is not physically equipped, and (3) to suggest treatment that may correct minor ailments. Hence, the prospective worker should be impressed with the fact that a pre-employment physical examination is advantageous to him as well as to the hospital.

Having obtained a complete history of the applicant, the next step is employment, provided the department head approves.

When a department head is in need of an employe, the application blanks on file for the position in question should be sent to him. He should review all information and select the best prospects for an interview. The applicant is contacted and an appointment for an interview with the department head is made. The final selection is made by the department head who will review with the employe selected the job specification, departmental regulations and wage rates.

From the time an applicant enters the door of the hospital for the first time until he is placed on the pay roll and becomes a regular employe, several things should be borne in mind:

1. An employe must be fitted to the job and not the job to the employe.

2. The greater the care used in selection, the more efficiency may be expected.

3. Labor turnover is expensive and wasteful.

4. A clear understanding of job specifications and of terms of employment is a vital factor in the selection of employes.

5. Careful selection is the only solution to the problem of stabilizing an adequate, efficient and happy working force.

Ingenious device—developed by Cutter research workers—spotlights tiny particles for precautionary testing of new Saftiflask elements. Just one of the tests that make solutions in Saftiflasks *safe!*

TO PREVENT possible introduction of particulate matter, new elements—such as new filters, pipe lines, stills, washers, as well as new lots of rubber stoppers, discs, glass rods and flasks—even though produced to rigid specifications, must pass the hurdle of meticulous tests at Cutter Laboratories.

These *uncommon* safety factors—just an indication of the extreme caution which surrounds the production of solutions *in Saftiflasks*—are attributable to the fact that these products are made in a government-licensed biological laboratory. Biological workers never take safety for granted.

Although *no* dextrose solutions are government-licensed, at Cutter Laboratories such solutions are produced under conditions mandatory for the production and testing of government-licensed biologicals. Dextrose solutions in Saftiflasks are tested chemically, biologically, physiologically—by a testing staff entirely divorced from "production."

Prescribe solutions *in Saftiflasks.* In two, one and half-liter sizes. Cutter Laboratories, Berkeley, California and 111 N. Canal Street, Chicago. (U. S. Government License No. 8)

DEXTROSE SOLUTIONS IN *Saftiflasks*

Public Relations Begins at Home

PAUL E. FAUST

IT IS at once stimulating and gratifying to those interested in a hospital to have the entire executive, administrative and operating group aware of the importance of public relations as a tangible subject. That is what we have at the Evanston Hospital, Evanston, Ill. Everyone, including the president, executive board, medical staff and superintendent, looks upon our public relations program as a personal and continuing responsibility.

The administration of this hospital (and we can speak for no other) is concerned with what the public knows about the hospital, its staff, its personnel, its equipment, its service, its training school, its research, its policies and, of course, its needs, present and future. We believe that when people know the hospital sufficiently, they will think wholesomely and will provide for it adequately.

We discovered that people think about a hospital actively when they have to go there as patients. At most other times they scarcely think about it at all. Much hearsay knowledge of a hospital is sketchy and inaccurate. While to most people a fine hospital is a benign, wonderful and sometimes miraculous haven, it is to a few others an expensive luxury, conducted with autocratic policies, whose doctors commit surgery for every human ailment.

It is our experience that we have a problem of relationship with the public the instant an individual comes to the admitting office. If the admission is an emergency, the circumstances may be quite acute, and in a few moments, no matter how our office people strive to be tactful and considerate, we may leave unpleasant impressions that no amount of skillful service will erase. We know that obtaining the data for our record cards, handling the subject of payment or credit and assigning a room are far from being clerical routine.

It might almost be said that our study of this subject is as close and continuous as any in our laboratory. Having, as it does, all of the variables of human conduct, we can simply say that the problem of handling admissions always exists, our supervision of it never relaxes and we hope our admitting clerks earn a grade of "A," at least for effort.

Almost on a par with admission is the first contact the public makes with us by telephone. It is not enough to explain that it was a rush period or that we had four accident admissions at one time or that all operators were in a frenzy trying to locate doctors. With four operators and a supervisor to help over rush hours we consider this service a genuine personnel and training problem. Sometimes our operators may consider our requirements exacting, but we know of many human situations, some of them comic but many bordering on the tragic, in which the promptness of telephone contact is of major importance.

Possibly, we shall some day solve the question of giving information by telephone. Possibly, too, we shall find out how to guard the confidences of doctors and patients and still give reporters what they want. We confess to a slip here and there, but if the public and the reporters knew the depth of our desire to meet their wishes fully, one of our public relations problems would be on its way to solution.

To the end that the public shall understand the essential importance of Evanston Hospital, we carry on a systematic educational program. This is internal as well as external. We consider it quite as important that the entire organization within the hospital know about its problems, finances and opportunities as that the outside world shall have an intelligent understanding. We want every person whose business is within the hospital to consider himself personally responsible for the hospital's good name, welfare and performance.

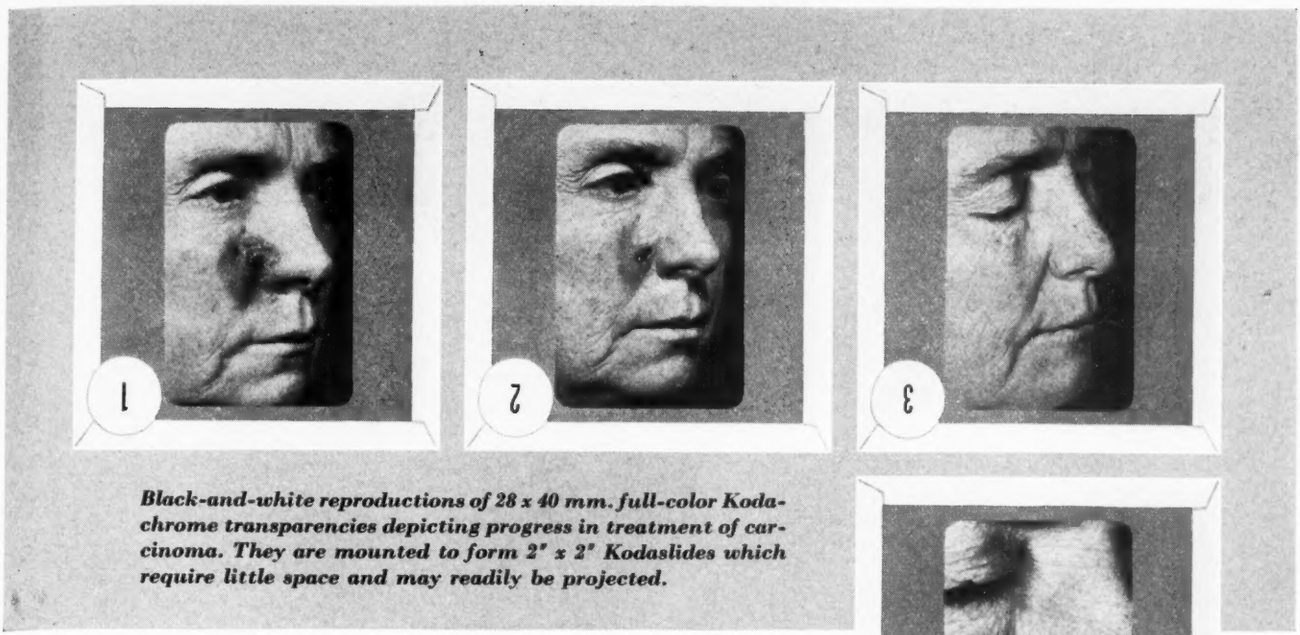
We hopefully expect, too, that the time will come when every family in the neighborhood will have a feeling of possessive interest in the institution and will patronize and support it accordingly.

This outlines something of the assignment which the public relations committee accepts and it explains a work that may carry on as long as the hospital functions. We seek publicity of an informative nature quite as systematically as any commercial enterprise. We are not keenly interested in just having the name of the hospital mentioned. We "campaign" our news stories.

For example, we conduct an annual church collection project called "Hospital Sunday." It is thoroughly organized as to committees, church bulletins and publicity. The publicity always has a central theme over and above the fact of a collection's being solicited. One theme that serves a special purpose is our charity work through the out-patient clinic. We employ experienced writers and all articles are reviewed by the president, chief of staff or superintendent for technical accuracy and ethical correctness.

As is probably the case with many hospitals, it has been impressed upon the president, the board and the management that there is a continuous evolution in the territory served and in the characteristics of our immediate community. A report on

The author is chairman of the public relations committee, Evanston Hospital.



Black-and-white reproductions of 28 x 40 mm. full-color Kodachrome transparencies depicting progress in treatment of carcinoma. They are mounted to form 2" x 2" Kodaslides which require little space and may readily be projected.

A WELL-EQUIPPED PHOTOGRAPHIC DEPARTMENT...

is an asset to any hospital

KODAK RECOMAR 33 with Miniature Kodachrome Adapter, mounted on Ciné-Kodak Tripod. This capable camera for "still" photography makes 3¼" x 4¼" or 9 x 12 cm. full-color Kodachrome transparencies, and black-and-white and infrared negatives; 3¼" x 4" lantern slides; and, with the Miniature Kodachrome Adapter, 28 x 40 mm. Kodachrome transparencies for 2" x 2" Kodaslides, such as are shown above.

IN the routine activity of every hospital, many interesting and unusual cases are encountered . . . numerous noteworthy surgical operations and methods of treatment are carried out. To indicate objectively the whole progress of the treatment . . . to have assurance that the scientific data will be explicit and readily understandable, photographs are essential.

Typical cases, as well, should be photographed for use by the staff as illustrative material for articles, lectures, scientific exhibits, lay educational displays, etc., which can do much to enhance the prestige of the hospital. Certain types of cases should always be photographed as a safeguard against the possibility of medicolegal complications.

Photography can be valuable also in diagnosis and determining progress resulting from treatment —for instance, infrared photographs, to portray the superficial venous circulation . . . motion pictures, to study orthopedic cases . . . full-color photographs, to indicate the effect of x-ray therapy.

In these and many other ways a well-equipped photographic department can render a service that is an asset to any hospital . . . that is virtually a necessity in modern medical practice. You should have up-to-date information about medical photography. Check the subjects that interest you most and mail the coupon below.

EASTMAN KODAK CO., *Medical Division*, Rochester, N. Y.

Please send information about the subjects checked: ☐ Black-and-white Still Photography ☐ Full-color Kodachrome Photography ☐ Infrared Photography ☐ Projection of 2" x 2" Kodaslides ☐ Motion-picture Photography

Name_____

Hospital_____

Number and Street_____

City_____ State_____

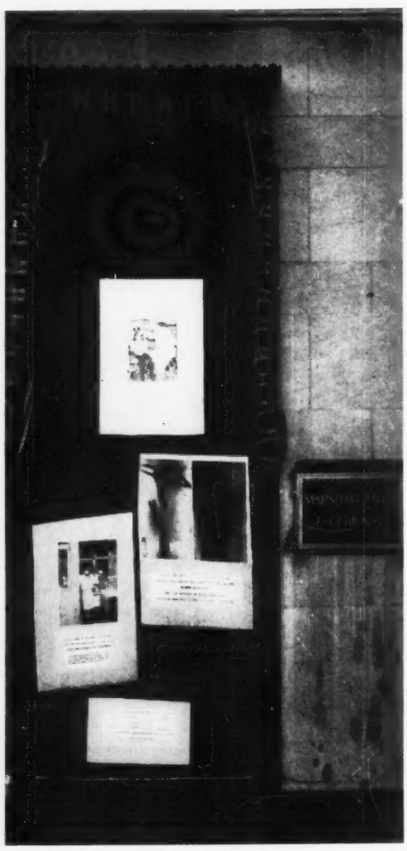
"Hospital Sunday" is an annual church collection project that is well publicized along one central theme. This window display in a downtown Evanston bank calls attention to the charity work carried on by the hospital's out-patient clinic.

the experience here may serve hospitals generally.

It was decided that surveys would assist the administration and help guide the public relations effort. First, the superintendent made a check on the residences of patients, which showed that the hospital and its staff were drawing patients from a constantly widening area.

The name, Evanston Hospital, of course, indicates that the institution was conceived as a one-city enterprise. However, while Evanston now supplies more patients than any one district, this survey revealed that the entire north suburban area and the northern limits of Chicago are now the field of Evanston Hospital. In fact, patients from 12 neighboring states were in the hospital at one time. This significant information makes for obvious adjustment by the public relations committee.

Another survey was undertaken to give the board a picture of growth of population and of income or wealth conditions in our immediate territory. Because of the unique geographic position of Evanston Hospital, the survey indicates a population trend that will call for hospital expansion to match it. This need cannot be charted or forecast accurately. But indications are plain enough to forewarn the board of needed developments over a ten year period.



Among other donors of window display space are Evanston department stores. The hospital employs experienced publicists to prepare its advertising copy.

One of our most successful publicity mediums is "The Pilot," a well styled monthly magazine, which is circulated free to leaders of thought in our natural geographic zone, to hospital training school graduates, to all interns and to hospital personnel. In the 16 pages of "The Pilot" are articles, personals, editorials, photographs and a feature contribution written each month by a member of the staff. We know by test letters to readers that the magazine is wanted and is closely followed.

We consider one of our major objectives to be the building of a list of philanthropists who will provide the growing endowment that must be obtained for a growing hospital. Creating a state of mind in the public that will produce a financially permanent future is not a simple matter. It is not something for which a certain and prompt formula has yet been produced, but we think we are on the right track.

With other puzzling questions, we should like to include that of "appeal." Which is the best appeal to employ to win new supporters and lay sound foundations for additional endowment? We believe firmly in a humanitarian point of view but are of the opinion that an emotional presentation of our subject is likely to be followed by adverse reactions.

Hence, while it may seem to the casual reader that we handle gripping subjects rather calmly at times, we feel that this is in keeping with the caliber of our hospital and is necessary if our work is to continue to have the hearty support of the staff.

On the public relations committee are an advertising agency executive and two publishers. Another advertising agency executive on the board of directors counsels on public relations projects.

A hospital service committee from the staff and executive group meets informally every other month for a cordial but candid review of many staff and board of directors' problems, including assignments for the public relations committee.

Evanston Hospital considers contact with other hospital managements as a definite item of relationship and strives to avoid isolation, provincialism, denominationalism or any sense of self-satisfaction.

When You Know the Service Man's Number "By Heart"

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● Why continue to put up with the service headaches and expense of out-dated, inadequate refrigeration? Scores of institutions who have modernized with new General Electric equipment are paying for it out of what it formerly cost for ice or current plus maintenance on their old refrigeration systems. And they have money left over besides! Find out NOW what G-E can do for *you.*

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With resources and facilities of the greatest electrical manufacturer in the world behind them, General Electric engineers have today developed the finest line of commercial refrigeration equipment in G-E history. *New lower prices,* new refinements, new money-saving features that produce better cooling for less cost . . . now make G-E equipment the outstanding standard of quality.

Before you invest a penny for any type of refrigeration equipment, see the G-E dealer or write direct to General Electric Co., Commercial Refrigeration Sec. CX3, Nela Park, Cleveland, Ohio.

GO G-E! —ALL THE WAY

General Electric offers a *complete line* of refrigeration equipment for *your* hospital. Anything you need—food storage cabinets for main kitchens and diet kitchens, "walk-in" coolers, biological refrigerators, ice makers, water coolers, etc.

THR-R-IFTY POWER BY THE FAMOUS G-E SCOTCH GIANT REFRIGERATING MACHINES

GENERAL ELECTRIC

COMMERCIAL REFRIGERATION

Noncoated Sterilizers

J. I. JONES

THE purpose for which surgical sterilizers are used demands that they be constructed for safety, reliability, cleanliness and sterilization, in the generally accepted time, and that they remain in those conditions after long usage.

For many years it has been the practice to construct the familiar autoclaves and utensil, water and instrument sterilizers of brass or copper having tin plating on the inner surfaces that contact the sterilized articles and having nickel plating or chromium plating on the outside. These platings eventually wear off or are otherwise removed and thereby present bare brass or copper surfaces which may not be readily cleaned. In such a condition they may contact sterilized supplies. Until recently, however, there has been little effort to remedy this undesirable condition.

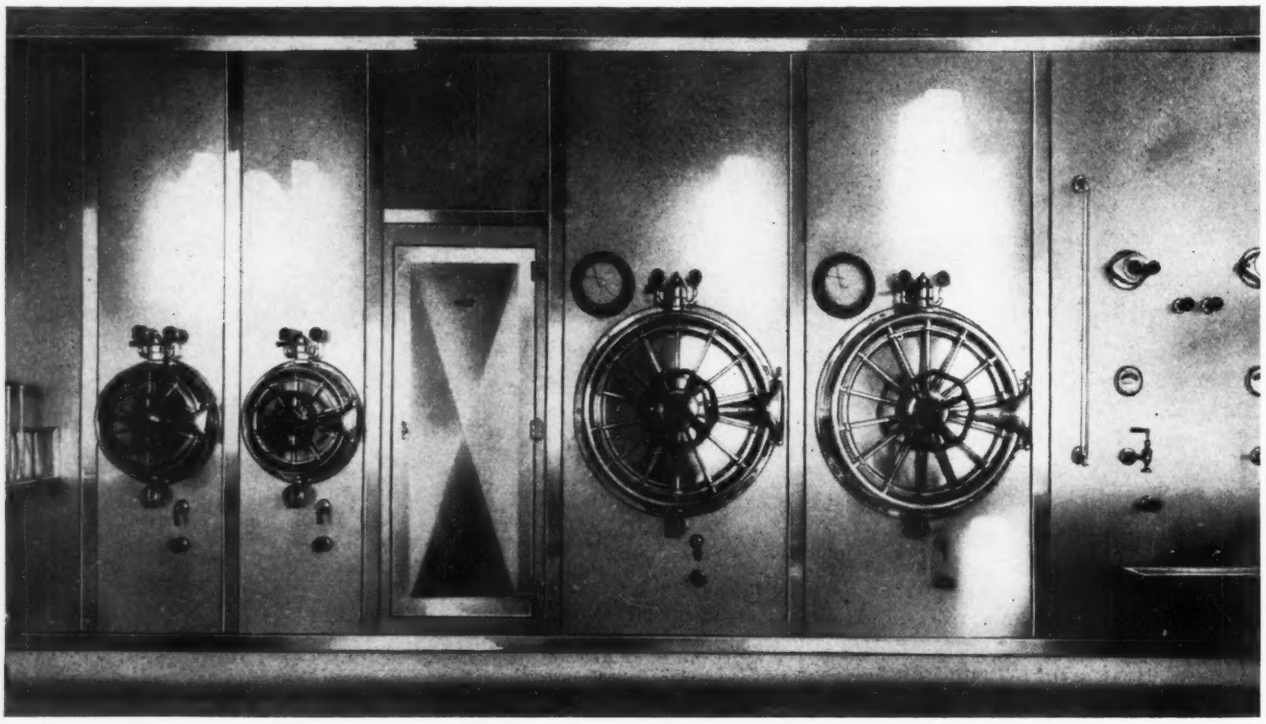
Mr. Jones is assistant chairman of the Federal Specifications Board.

While improvements have been made in the instruments, in technic and in control, the structural portions of the sterilizers are just beginning to change with the rise of corrosion resisting metals that possess properties and characteristics superior to brass and copper.

Corrosion resisting metals, such as monel and stainless or corrosion resisting steel, are now being used because they have been found, after extensive tests, to be stronger and more rigid. In addition, they may be easily maintained in a clean sanitary condition and they are pleasing to the eye. Further, these metals will not corrode when subjected to operating conditions that require frequent heating and cooling in the presence of moisture. Therefore, it is no longer necessary to replate the metals.

Recognizing the desirable characteristics of corrosion resisting metals, as well as the increasing use of them for other purposes, the government by means of federal specifications pioneered the adoption of these metals in the construction of sterilizers. This specification included under the designation of noncoated sterilizers those constructed of metals, such as monel and stainless or corrosion resisting steel, these metals being known as corrosion resisting metals.

The first large installation of noncoated or corrosion resisting metal sterilizers was made by the federal government about three years ago in the new U. S. Naval Hospital in Philadelphia. The satisfactory results of the installation may be judged from the fact that, since this installation was completed, the Navy De-



Both sterilizers and wall paneling are of noncoated metal in the John Gaston Memorial Hospital, Memphis, Tenn.

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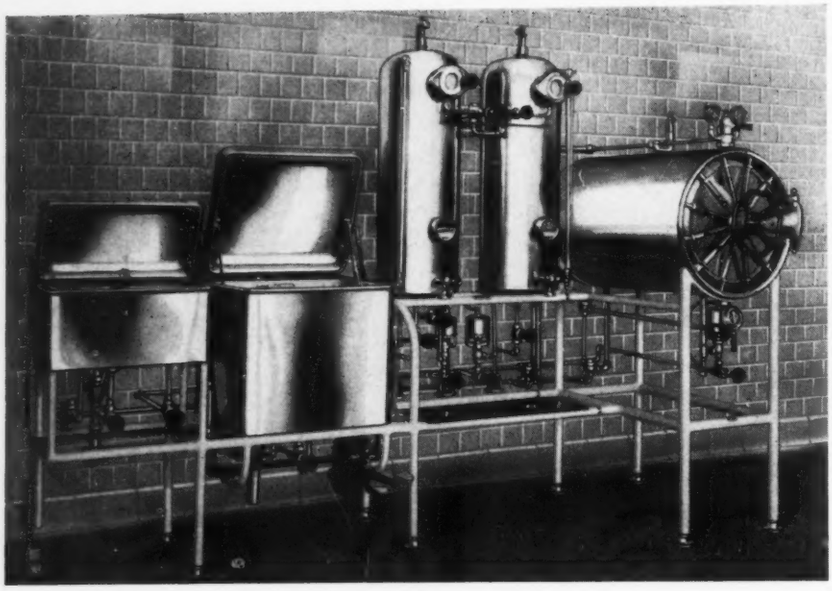

This battery of sterilizers of the exposed type shows both varieties of construction: stand of coated construction and sterilizers of noncoated.

partment and other government departments have adopted the new type of sterilizers.

At the time the new type of construction was first suggested, there was a hesitancy on the part of manufacturers to commit themselves concerning the cost of the proposed sterilizers and they appeared doubtful of their ability to fabricate the metal with their existing shop tools. This reaction was to be expected as the manufacturers were accustomed to working soft, low strength materials of brass and copper and their shops were not properly tooled to handle high strength materials. Adoption of the latter materials, therefore, necessitated educating and training the shop personnel of sterilizer manufacturers in the proper fabrication and welding of these metals.

The previously mentioned federal specification for sterilizers also requires an additional corrosion resisting metal, known as white metal, which is an alloy containing about 20 per cent of nickel. This metal, which is intended for stands, piping and fittings, presented casting difficulties at first, because the material, having a higher melting point and less fluidity, was more difficult to handle than the usual brass or bronze castings.

Manufacturers, sensing the trend, began to train their personnel and install tools that would adequately handle the noncoated materials. Most manufacturers are now able to furnish promptly the new noncoated sterilizers as well as those of the old type.

It is believed that when the advantages of noncoated sterilizers are generally known and when the new installations are examined in some of the large hospitals, the demand will be almost wholly for noncoated construction. Once this condition is reached and manufacturers are fully tooled to do the work, they will be able to fabricate the new noncoated sterilizers as cheaply or cheaper than those of the old type with plated brass and copper construction.

Present prices for noncoated sterilizers are only slightly in excess of those for nickel plated construction and in certain cases are lower than the coated type of sterilizers which are chromium plated over nickel plating. Unless chromium plating is used over nickel plating, satisfactory results are not ensured.

The main advantages of corrosion resisting metals may be summarized as follows:

1. Increased Safety: (a) higher internal and external pressures withstood; (b) higher safety factors comparable with the requirements of A.S.M.E. Boiler Code; (c) no danger that shells may collapse; (d) no dezincification as often encountered in brass, and (e) resistance to corrosion.

2. Improved Appearance and Maintenance: (a) elimination of necessity for platings and coatings and their renewal, thereby ensuring a permanent neat appearance, and (b) improved sanitation, permitting cleaning with abrasives, if desired. (This method of cleaning will remove tin, nickel or chromium coatings as used in the construction of the old type.)

3. Comparison of Costs: (a) present costs of noncoated sterilizers are only slightly higher than those nickel coated; (b) noncoated sterilizers are usually cheaper than those chromium plated over nickel plating, which is desirable where chromium plating is employed, and (c) costs will be comparable with coated construction if noncoated metal is adopted as a standard and if sterilizers are manufactured on a production basis.

These sterilizers are now being extensively used by the federal government and are in use in a number of large voluntary hospitals.

Automatic Elevators

The Swedish Hospital at Seattle, Wash., has replaced its main passenger elevator with a new elevator having a speed of 250 feet per minute with both cab and doors entirely automatic in operation.

Push button control is used. As the car approaches a landing, it is slowed down and automatically leveled to the exact floor line. While it is leveling to the floor solid doors on the cab and the hatchway are opening automatically. When a push button is pressed, these doors close automatically and the car proceeds to answer the call.

The buttons at the landings have indicators telling the waiting passenger when the car is coming and when it arrives at his landing.

The automatic doors are provided with a sensitive edge safety device. If a person is in the way of the doors while they are closing, they reverse automatically as soon as they touch the passenger.

The Emanuel Hospital of Portland, Ore., recently completed installation of a similar modern automatic self-leveling elevator to replace equipment that had become obsolete.

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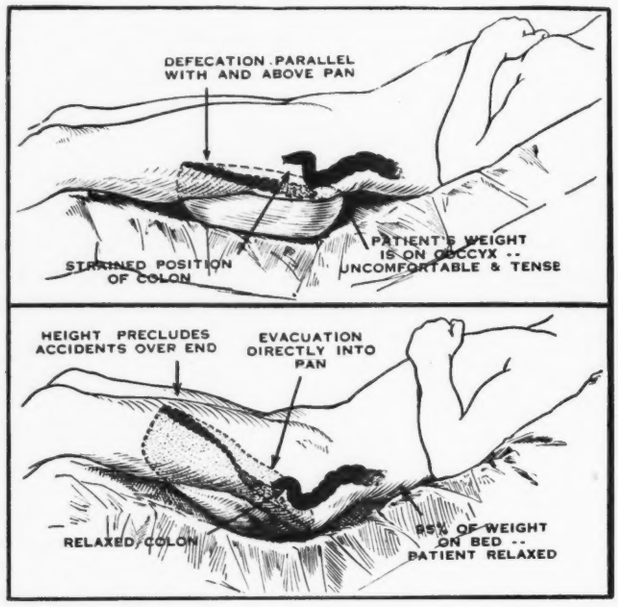
The Bedpan Loses Its Barbarism

JOHN B. deC. M. SAUNDERS, M.B.,
and JAMES W. MORGAN, M.D.

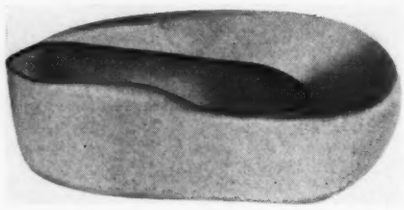

DEFECATION PARALLEL WITH AND ABOVE PAN
STRAINED POSITION OF COLON
PATIENT'S WEIGHT IS ON COCCYX -- UNCOMFORTABLE & TENSE
HEIGHT PRECLUDES ACCIDENTS OVER END
EVACUATION DIRECTLY INTO PAN
RELAXED COLON
85% OF WEIGHT ON BED -- PATIENT RELAXED

Diagrams showing, above, the unnatural position of the patient on the ordinary bedpan and, below, the relaxed position bedpan here described. A photograph of this new type of bedpan is shown.

IN APPROACHING the problem of improvement in existing types of bedpan,* it seemed logical and necessary to make a survey of the types of apparatus both in past and current usage.

The survey was made by means of questionnaires to representative hospitals on the Pacific Coast and in the East; by consultation of the literature, largely from nursing and hospital journals and textbooks; by correspondence with manufacturers and examination of their lists and by discussion with manufacturers' agents and mechanics; by inquiry and inspection of existing apparatus in local institutions, and by examination and personal testing of sample bedpans.

In response to the detailed questionnaires, 163 hospital executives sent data that have been valuable. The questionnaires revealed that, almost without exception, the type of apparatus employed in large institutions throughout this country consists of one or other of the common variety of bedpans. These types conform to the same general design and exhibit only minor modifications among themselves. Until recently there has been no radical improvement in design or shape. Almost all of the bedpans in use are made



from one of four materials: white enamel, stainless steel, chrome-nickel alloy or monel metal.

The bedpan we have devised can be made of any desired metal. Most of the criticism has been directed at the shape of the bedpan. Early in our studies we began to make numerous observations on the technic and use of the pan. It was at once apparent that no bedpan was ever made to fit the buttocks. We immediately began to make positive and negative models of patients' buttocks in the various positions used during defecation. When the existing pans were fitted to these positive models, we had the explanation as to why all patients complain of discomfort. We, therefore, devised a bedpan top that is "form-fitting."

Our next step was the study of the physiology of defecation. We found that in using most of the existing pans the patient is in such a position that he is defecating parallel with the top level or long axis of the pan. Naturally the pan needs to be more or less at right angles to the long axis of the anal canal. If the pan could be tilted, it also would help to keep the patient from urinating on the bed.

Theoretically this could be overcome by increasing the height of the anterior end of the pan but, to do this, made such an apparatus unusable in existing types of mechanical bedpan washers. As such washers are in almost universal use in large institutions and constitute an expensive item, it seemed desirable to conform to their dimensions.

The ischial tuberosities in the male are approximately 4½ inches apart. In nearly all of the existing pans the aperture is more than 6 inches wide. As a consequence, if the patient is in a sitting or semirecumbent position, his buttocks sink down until the skin is less than one finger's breadth from the bottom of the pan. The patient, therefore, usually finds that he is sitting in his feces.

In addition, the ordinary bedpan forces the patient's buttocks together and mechanically closes instead of opens the anal orifice; the patient's accessory muscles of defecation are already working at a disadvantage because of semirecumbency or full recumbency. To overcome this defect it is necessary to make the bedpan opening narrow. We have,

Mr. Saunders, F.R.C.S. (Ed.), is professor of anatomy and Doctor Morgan, F.A.C.S., is instructor in surgery and proctology, University of California Medical School.

*The late U. S. Senator James D. Phelan of California, among other bequests, left a sum of money for "medical research to improve the comfort of bedridden patients." He indicated verbally that, above all things, he was desirous of making it possible to do something about that barbaric relic the bedpan. He spoke with feeling from personal experience of its miseries. In 1935, under terms of the bequest, provision was made by the trustees, Dr. John Gallway and Dr. Louis Mendelsohn, physicians to the late senator, for investigative work directed toward the development of apparatus for the comfort of the bedridden at the University of California Medical School. The outcome of this work is briefly reported here.

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therefore, made the aperture in our pan 4½ inches wide, an opening adequate for the giving of enemas.

An additional feature of the pan with the narrower aperture and the consequent greater surface for skin contact is that it allows for more purchase. This not only gives greater security and comfort, but a *point d'appui* is established. Thus there is a definite resistance against which the patient can use his accessory muscles of defecation.

We have had considerable experience with the making of experimental pans most of which have been turned out by hand. At various times we have had opportunity to get first-hand information from our nurses in the University of California Hospital and they have given us valuable assistance. Recently we have worked with a manufacturer who has spent several years and considerable money in an effort to improve the bedpan. He has convinced us that many of his principles are sound and we have, therefore, made arrangements with him to embody in his product the good features of both our ideas.

Our bedpan is offered more or less in the nature of a "preliminary report," since we have some rather ambitious plans, along other lines, to continue and carry out the spirit of Senator Phelan's wishes to "improve the comfort of the bedridden."

Bedpan With Back Rest

F. L. SHIVELY, M.D.

FOR the last twenty-five years every physician in the country has heard patients complain of the inconvenience of hospital bedpan facilities, but no one seemed to think they could do anything about it. In 1932 I was persuaded to develop my idea of a piece of equipment that would be satisfactory to patient, nurse and physician. It is a stainless steel, nontilting bedpan with a back rest, enabling the hospital patient to assume the natural sitting position for defecation.

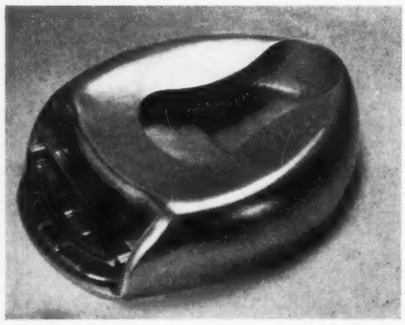
The normal physiologic position for defecation is a sitting posture. A normal, healthy man, becoming suddenly ill, is taken to the hospital, where he is forced to defecate in an unnatural position. His weight upon the bedpan causes it to sink into the mattress, and the act of defecation is performed in an uphill direction, a condition that interferes with proper muscular leverage.

Careful observation, by groups of physicians, produces the estimate that 90 per cent of hospital patients could avail themselves of better bedpan facilities if the proper equipment were available.

Six years have been spent in the development and careful engineering of the new bedpan described here. It is so constructed that it cannot overturn or move from side to side even on a soft mattress. The back rest folds neatly beneath the bedpan proper when not in use and is raised or lowered by three simple mechanically balanced motions.

Doctor Shively is a practicing surgeon at Miami Valley Hospital, Dayton, Ohio.

Bedpan with the back rest up.



The back rest folds neatly beneath the pan when not in use and is raised or lowered by mechanically balanced motions.

For many years, hospital administrators have contended that any piece of hospital apparatus that moves is frequently out of order. They argue that many untrained hands use a piece of mechanical equipment and moving parts are frequent sources of difficulty. However, hospital mattresses, because of properly engineered beds, can now be moved into different positions without being out of order. Hospitals now use many other types of moving equipment with satisfaction.

Realizing that the distrust of moving parts would have to be overcome in a bedpan with a back rest and that the elimination of this objection was an engineering problem, I gave particular attention to perfecting my pan against this fault. Three groups of engineers, in several states, have passed favorably and enthusiastically upon its mechanical principles. Safety factors of from 400 to 500 per cent in excess of requirements are present. The corrosion factor is nonexistent because corrosion-proof material is used throughout its entire construction. Its size is such that it can be emptied into the newer type of automatic sterilizing equipment.

Stipple Finish for Walls

In repainting patients' rooms, especially those in which there are imperfections or blemishes in the plastering caused from patching or remodeling, a flat coat of paint tends to bring out the flaws and to make them more noticeable. A brush-stippled finish is used with great satisfaction in this case. It also eliminates the glare caused from light reflections and gives a softer effect. This process requires more paint than the ordinary flat coat, but the effect warrants the extra expense. With a little practice any house painter can apply it satisfactorily.—*Frank J. Walter, St. Luke's Hospital, Denver.*

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Convalescence Made Colorful

GERTRUDE H. DUNCAN

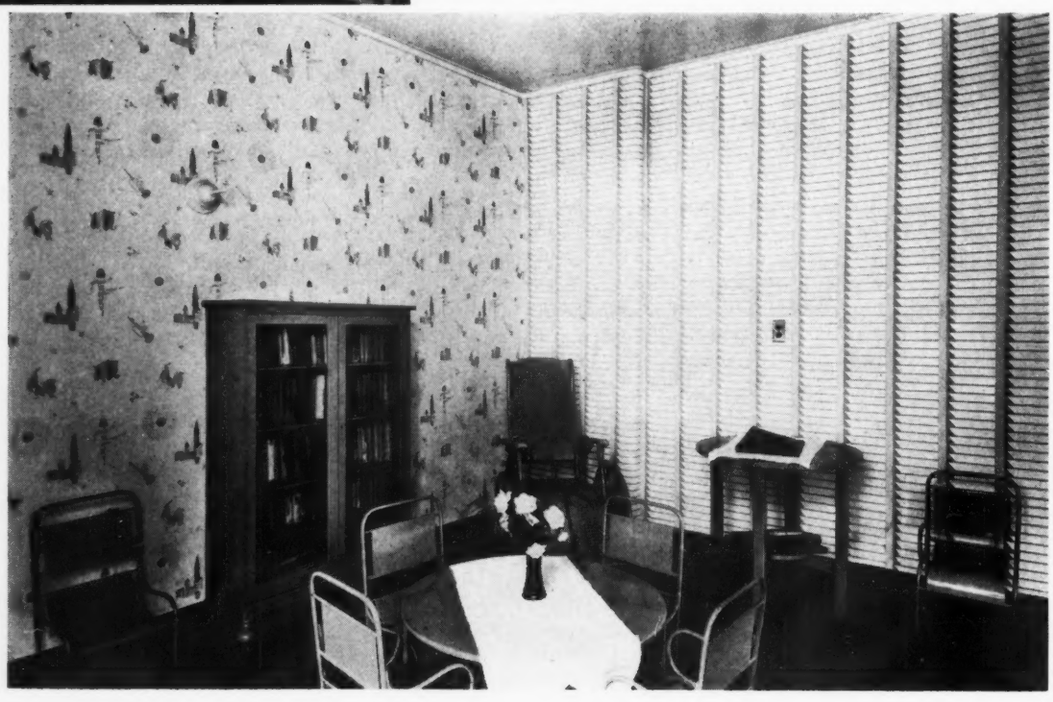
WHEN the children's wing of the Ellis Hospital, Schenectady, N. Y., was redecorated, we thought it would be a good idea to use especially designed wallpapers in order to find out what effect wall decorations with pattern interest would have in the way of making surroundings more pleasant and homelike. The results have been most successful. Doctors, nurses and patients seem to enjoy working and living in the cheerful surroundings and have acquired great respect for the decorative walls. Details of our program should be of interest.

We started with the reception room at the end of the hall, after consultation with a decorator, and found that a gay plaid paper with a light green, ivory and soft orange color scheme made a perfect setting for the Early American maple furniture of the room. This informal plaid established a friendly atmosphere which was exactly what we wanted to create.

Printed percale draperies and furniture covers, lively with motifs of garden flower bouquets, blend with the wallpaper, accentuating the simplicity of the Colonial furnishings. We have made visitors as comfortable as possible by providing easy chairs, lamps, magazines and books to read. All the furnishings can be cleaned easily, particularly the wallpaper, which, when soiled, can be washed with soap and water. We have washed it frequently and find that ordinary spots vanish with ease and marks of an unusual nature

Visitors are invited to relax and be comfortable in the informal atmosphere of the reception room at the Ellis Hospital. Even the books to while away the moments of waiting are provided.

The author is assistant superintendent of the Ellis Hospital, Schenectady, N. Y.



Convalescence is speeded by the cheerful wallpaper depicting "Toyland," complete with castles and wooden soldiers. Small patients play in a room furnished with miniature tables and chairs made especially for them.

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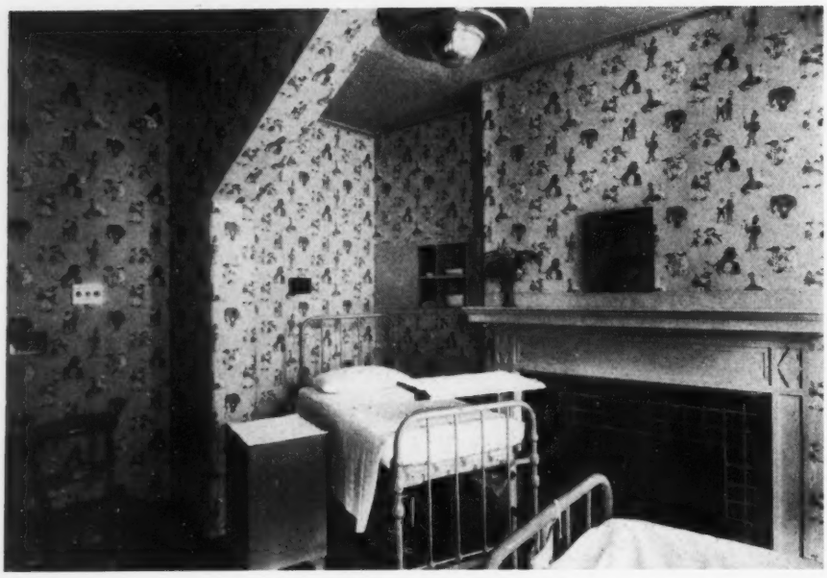

The circus has come to town and settled down in the boys' ward where it is heartily appreciated. Sketching the animals is a favorite pastime.

are easily removed by the use of a solvent.

In the children's department we have a playroom in which convalescents can amuse themselves to their hearts' content. This was an excellent opportunity to use wallpapers that would stimulate their active imaginations. We selected "Toyland," a fairy book paper with castles, wooden soldiers, toy horns, elephants and roosters in blue, coral red and yellow, for three walls of the room and for the fourth wall, unbroken by windows, a pattern called "Venetian Blind" in yellows to match the background of "Toyland." Using "Venetian Blind" at one end gives somewhat the effect of one large window which tends to open up a room, making it seem larger than it is.

There are diminutive metal chairs and a low table at which the small patients can play with their toys and games, look at pictures and read stories. A maple bookcase, filled with story books, is an attractive bit of decoration against the yellow background of the paper. Linoleum with block pattern offers a nice contrast to the pattern of the wallpaper, repeating some of its blue tones. Everything, including wallpaper and fabric, is washable, thereby upholding strict rules of hospital sanitation.

For the boys' ward we chose a wallpaper called "Circus" with a color scheme of red, white and blue, which seems to have a sure-fire appeal. Some of the boys who are confined to their beds occupy themselves with pencil and pads sketching the elephants, lions, dogs and trained seals going through their antics.

Then there were many private rooms to be considered. One especially pretty room is decorated with a dainty paper called "Dogwood." It is covered with fragile white dogwood blossoms with tiny yellow centers on a background of light turquoise blue and suggests the fragrance of a garden. The beauty of this background sets off the white curtains, bedspread and the soft wood tones of the Early American furniture. To ensure privacy draperies may be drawn concealing the portion of the room designed for sleeping. These draperies are of a plaid material in the same blue and white of the wallpaper but of contrasting design. Inlaid linoleum covers the floor, and an easy chair with colorful cushions ties in with the color scheme. This room has delighted many a little girl.

Another private room takes on a sprightly air through the use of a wallpaper showing designs of potted plants picked out in hues of pottery blue, yellow and red on a plaid background of a very soft yellow, blue and white.

The wing has been much admired by everyone and has been most satisfactory outside of its lovely decorative effects. It is true that the initial cost of papering rooms was more than that of painting in our case.

To paint and paper a room, 12 by 17 feet, required $10.24 plus labor:

1	gallon paint	@ $2.64
16	rolls washable paper	7.20
1	lb. sizing	.20
2	lbs. paste	.20

To paint a room the same size, giving it two coats, would require 3 gallons of paint at $2.64, totaling $7.92 (plus labor).

The maintenance cost of the papered room, however, is less, as no periodic wall washing is required. The washable paper can be washed, as necessary, with soap and water for finger marks and other everyday stains. The unusual oil, grease or medicine stains can be removed by the use of solvents.

Decorations serve to teach the nurses and nonprofessional workers how to care for attractive furnishings.

HOUSEKEEPER'S CORNER

• In rooms in which there is considerable furniture, noise may be reduced by placing acoustical boards under table tops and chair seats. This information comes from Iowa State College where noise in the cafeteria was cut down 52 per cent by this method. This type of soundproofing costs little.

• Do you know that bronze paints should not be applied in damp weather? Dr. W. B. Talbot, superintendent, and Lorentz A. Westvig, chief engineer, New York Post-Graduate Medical School and Hospital, write the Housekeeper's Corner that these paints will dry under such circumstances, but the finish will be without lustre, like ordinary paints.

• "What is the best way to clean the tile and porcelain in bathrooms, toilets and utility rooms?" "What will give me the best results in renovating our carpets and rugs?" "What should I know about the soaps I buy?"

These and many other questions are answered concisely and authoritatively in a booklet called "Soaps and Cleaning Methods for Hotels" which has recently been published by the American Hotel Association. It contains information that no housekeeper will want to do without. Copies are available by sending 50 cents to Mrs. Grace Woolley, American Hotel Association, 221 West 57th Street, New York.

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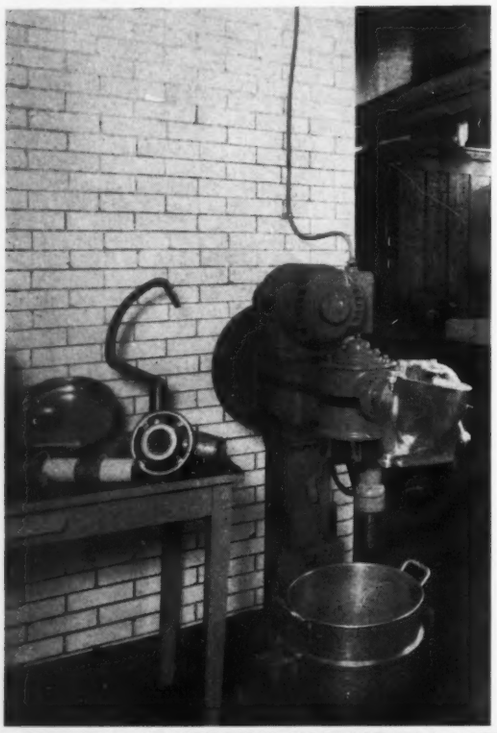
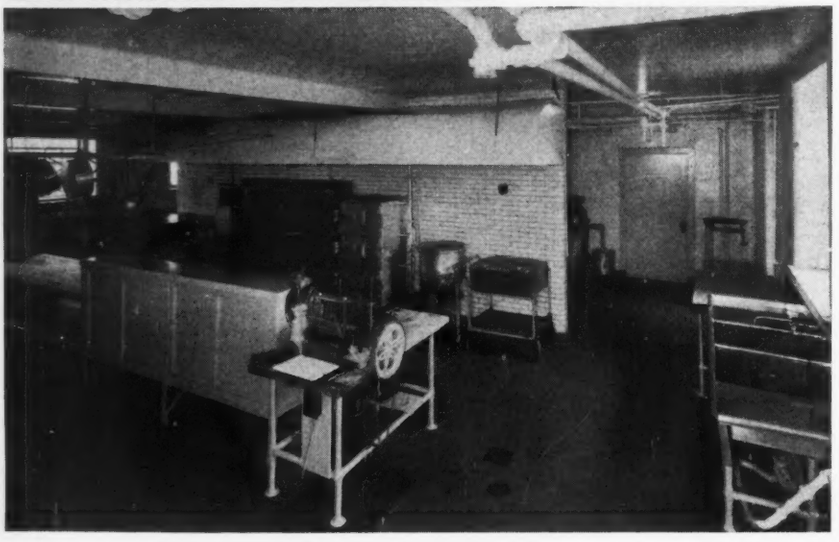
Rejuvenating the Kitchen

DILLIA STEINER

WESLEY Hospital, Wichita, Kan., is fortunate in having a woman's board that is able and willing to make valuable contributions to the work of the hospital, a 246 bed institution. Knowing our need for new stoves, the board decided this year to make its gift to the dietary department. Since 1920 when the hospital was built, the kitchen has had little new equipment. The floor was cement—porous, uneven, patched and impossible to make attractive in appearance. The woman's board volunteered to buy equipment on condition that the hospital put in a new floor. This was a wise plan, because the floor was a necessary foundation for any improvement in the kitchen.



The 18 year old food mixer at Wesley Hospital has been replaced by the latest equipment, a time-saving change for an institution that must serve some 725 meals every day.



A tile wall divides the kitchen. The pot and pan sink is thus kept out of sight. A pastry table and vegetable sink of stainless metal are new pieces of equipment, and others will be added gradually. A new floor of red quarry tile is an improvement adding to the comfort, appearance and cleanliness of the room.

Quarry tile seemed to be the best material for our purpose. Although it was more expensive than other materials considered, we believed it would be most satisfactory over a long period of years. The new tile raised the height of the floor 2 inches and made it necessary to raise all floor drains to the same height. The floor was put in in sections and, although we were considerably inconvenienced at times, we served meals three times a day to patients, nurses and employes.

In deciding which pieces of equipment to replace, we tried to keep in mind those that would be of greatest help in improving food service to the patients. We could have replaced equipment to improve nurses' dining room service or we could have located the dietitian's office more conveniently, but we felt that the patients should have the first consideration.

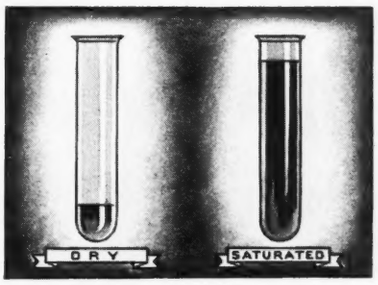
With the exception of the coffee urn and the potato peeler every piece of equipment in the kitchen could have been replaced to advantage. New ranges were most important. The old ones were of the coal burning type, which had been converted to gas. It was necessary to heat the top and the ovens at the same time, thus using much more gas than was actually required and heating the kitchen unnecessarily. There were no temperature controls.

After much investigation we chose two sections of gas ranges, a pastry oven and a fry top section with broiler beneath. The single deck pas-

The author is dietitian at Wesley Hospital, Wichita, Kan.

Three Reasons

WHY RY-KRISP IS SO HELPFUL IN CASES OF COMMON CONSTIPATION



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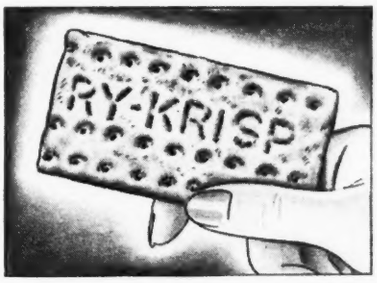
Ry-Krisp, because of its low moisture content, only 6.8%, and its porous structure, has an exceedingly high absorbing power—one wafer, carrying only 4.5 grams of available carbohydrates, will absorb 5 times its weight in water. Note moisture content of dry and saturated Ry-Krisp wafer at left.

HIGH PENTOSAN AND CRUDE FIBRE CONTENT...
Ry-Krisp is simply whole rye, salt and water, double baked for brittle crispness. It has a high natural percentage of bran, which provides bulk, and a high pentosan and crude fibre content to stimulate normal peristaltic action.



A TEMPTING, DELICIOUS FOOD
Ry-Krisp involves no unpleasant dosage. Instead, it offers the tempting, crunchy goodness of a natural, delicious food. Patients eat it regularly and enjoy it...a fact which makes Ry-Krisp particularly valuable in prescribing to children, and to busy men and women tied down to a daily routine.

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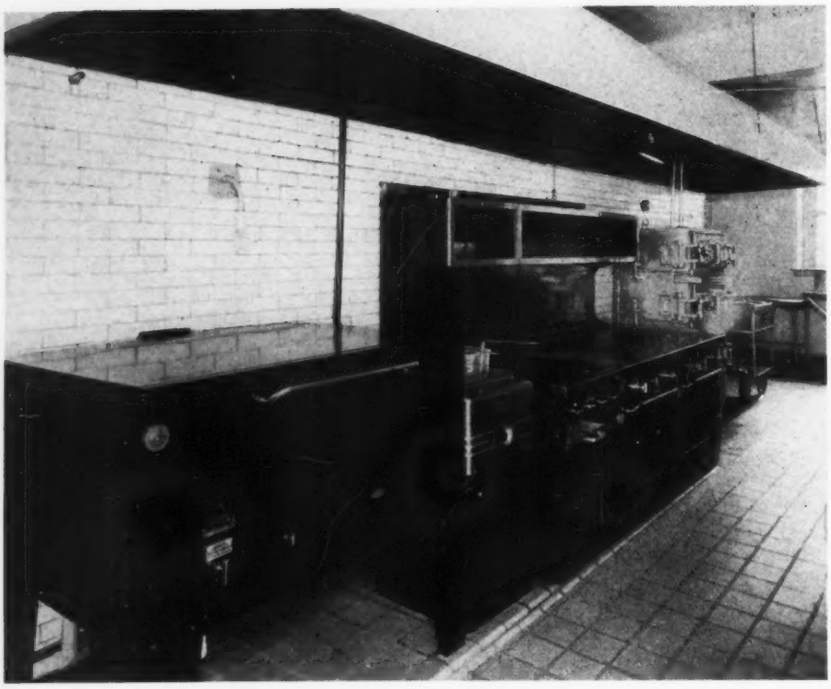


Two gas range sections, a pastry oven and a fry top section are new. An electric deep fat frying kettle also has been purchased.

try oven replaces two range ovens and has more baking space than the old. The new ovens are well insulated and the temperature control feature is a great improvement. It is now possible to have a slow oven without letting the door stand open.

Deep fat frying done on top of the stove has always been a source of worry during the process because of the fire hazard. To remedy this situation we chose an electric deep fat frying kettle that has many uses. We like it especially for frying bacon for the patients' breakfasts.

Our 18 year old food mixer we feared would not operate much longer without a great deal of expense. This was replaced by a new mixer with improvements and many new attachments. The soup strainer used for making vegetable purées and applesauce is an efficient and time-saving device.

Our new pastry table has bins for two kinds of flour, sugar, brown sugar and cornstarch. Spice drawers are on a shelf above the table and there is space for pie pans in the drawers. This table has a stainless metal top and surfaces. We also purchased a stainless metal vegetable sink which should last for years without deterioration and can be easily kept clean.

In order to improve the efficiency and appearance of the kitchen, we have rearranged some of the equipment. The pot and pan sink is now back of the tile wall which divides the kitchen. This keeps soiled pans out of sight in the main kitchen. We still need a more suitable rack for pots and pans and we plan to have it built from materials already on hand at the hospital.

The potato peeler was purchased only two years ago so it is in good condition. However, we had a base built for it and it now stands high enough for the potatoes to drop into a sink.

In our ideal kitchen, we shall have all the sinks of stainless metal, a new food table, new counter, new dish carts and stainless metal cooking utensils. These pieces we shall add gradually.

With the new stoves and mixer, we can improve our food products considerably. The sink and pastry table add immeasurably to efficiency and appearance. The red tile floor gives an atmosphere of cheerfulness and cleanliness which could not be obtained without it.

The total cost of modernizing the kitchen was $3421, of which the new equipment cost $2019 and the floor, $1402.

FOOD FOR THOUGHT

• Plain stewed rhubarb is one dish that is either extremely popular or else has no appeal whatever. Even those who would not so much as lift a spoon for a taste have been known to become frankly enthusiastic over rhubarb baked with 3 parts rhubarb and sugar and 1 part sliced orange. "A very palatable dish," they agree.

• What to do about those aluminum pans that have become discolored after foods or water containing iron or alkali have been cooked in them! Ever hear of this remedy: Boil a solution of vinegar and water in the pan, allowing 2 tablespoons of vinegar for every quart of water used? Presto, the stain disappears!

• Observation and experience in the management of hospital food service will again be available to graduate dietitians this summer through the field practice course given at the Society of the New York Hospital, New York City, under the direction of S. Margaret Gillam. The course, which starts July 3 and continues through August 12, is equally divided between administration and diet therapy.

Administrative experience is given in menu planning, food ordering, purchasing, food stores control, use of quantity recipes in food preparation, food accounting, pay roll analysis and control of supplies and equipment through inventories. Four kitchens and nine dining rooms are in operation in the hospital and 6000 meals are served daily. Operating on a commercial basis are two cafeterias, a soda fountain and lunch counter and a guest dining room. Special emphasis is placed on budgetary control of these units.

Information may be obtained from Miss Gillam, Society of the New York Hospital, 525 East Sixty-Eighth Street, or Mary deGarmo Bryan, Teachers College, Columbia University. A limit has been set on the number of dietitians who can enroll for the course.

• A much debated question—that of the effect of pasteurization on the calcium and phosphorus of milk—has received two new contributions from abroad. Two studies, one from England, the other from Scotland, agree that pasteurization of milk does not lessen the amounts of calcium and phosphorus retained by the body. These conclusions were reached as a result of balance experiments on young white rats, according to *Nutrition News*.

RECENT ADVANCES IN THE SCIENCE OF NUTRITION

VII. The Unknown Vitamins

● The past twenty years of biochemical research have steadily brought additions to the list of vitamin factors known to be indispensable in proper human nutrition. Today, only vitamins A, B_1, C and D, riboflavin and the P-P factor are universally considered as essential to man. In general, the requirement for these factors is greater in certain phases of the human life cycle than in others.

This list of essential factors is probably incomplete. It has been aptly stated (1) that our species has evolved in the direction of lengthening rather than shortening the list of known dietary essentials. However, it is reasonable to believe that the above list, although incomplete, probably does include all factors whose absence from the ration may cause the most severe types of human dietary deficiency disease.

Investigations on the nutritive requirements and the biochemistry of the lower forms of animal and plant life constitute the frontiers of modern vitamin research. From studies such as these may come the first clues as to new vitamins which may ultimately be proven essential in human nutrition. For example, it was upon research of this type that the dietary requirement of the rat for riboflavin was established and the importance of riboflavin (1) in human nutrition postulated.

During recent years, a large number of factors essential to animals other than man has been enunciated (2). As examples might be mentioned the factor in plant juices required by herbivora (3); the factor in fresh meat essential to trout (4); and vitamin K, needed for normal blood coagulation in fowls (5). Whether these or others of the factors essential to lower forms of life will also prove indispensable to man, the future must decide.

The knowledge that our present list of essential vitamins may be incomplete, need not be alarming. However, such knowledge should serve to emphasize the desirability of a diet formulated according to the best present concepts of the science of nutrition. Nature intends that man should receive all dietary essentials, known or unknown, through food and it will be through the medium of a judiciously chosen, varied diet that these essentials can best be obtained. Needless to state, the several hundred varieties of wholesome, nutritious, commercially canned foods lend themselves admirably to formulation of such varied, protective diets.

AMERICAN CAN COMPANY

230 Park Avenue, New York, N. Y.

(1) 1938. J. Amer. Med. Assn. 110, 1278.
(2) 1938. Ibid. 110, 1441.
(3) 1936. Proc. Soc. Exper. Biol. Med. 35, 217.
(4) 1928. Science. 67, 249.
(5)a. 1935. Nature. 135, 652.
b. 1935. Biochem. J. 29, 1273.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the forty-sixth in a series, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

Food for Finicky Patients

MARY HARMAN RISTE and
MARY ELIZABETH HERBERT

THERE is always danger of food being too ornate and overgarnished, as the stories of Sophie Kerr illustrate. A garnish should be only an accent. It should complement food, not obstruct it.

Attractive food need not be expensive. Mushy, shapeless food may be served in ramekins or casseroles. Common hospital dishes, such as mashed potatoes with dried beef sauce, may be both attractive and delicious if the potato is tubed into a nest and the frizzled beef built into a sauce instead of being dropped into the ordinary "whitewash." Chopped parsley or chives added to the potatoes give an interesting touch and a sautéed mushroom cap, a jaunty look.

Food has gone modern and the new cook books say that color schemes and such tricks are *déclassé*. They should not be overdone, but the patient's tray is an entirely different problem from the family dinner at which dishes are passed separately. A tray must harmonize and be interesting as a whole. Besides the ordinary things to consider in menu planning, such as food requirements, costs and labor distribution, the shape of the food, the texture, the color contrasts and harmonies and, above all, the taste must be kept in mind.

We spend time on food preparation at Butterworth Hospital, Grand Rapids, Mich. We find that it pays to spend time on food and, besides, it is fun. Patients may be intrigued by an attractive dish so that even the ones with small appetites will take a taste to satisfy curiosity and, finding the flavor delicious, will eat it all before they know it. Our food costs are not high but are comparable to those of other hospitals of the same size. Some of our food ideas and fancies are listed below.

Without Flavor, Looks Is Lost

Soup Garnishes

1. Sour cream
2. Whipped sweet cream and white of egg
3. Sprinkling of herbs, such as chives, fresh thyme, mint, parsley. Try fresh tarragon leaves or dill chopped fine on chilled consommé.
4. Curry, saffron, mustard in pinches (Saffron is particularly good with potato soups.)
5. Grated raw carrot or green pepper
6. Chopped celery leaves
7. Sautéed mushrooms
8. Custard cubes seasoned with celery salt
9. Blanched almond julienne
10. Pearl tapioca
11. Wild rice
12. Try mixing cubed plain consommé with tomato consommé.

The authors are dietitians at Butterworth Hospital, Grand Rapids, Mich.

Soup Accompaniments

1. Melba toast, plain or savory
2. Crackers with celery seed
3. Pretzels, plain or with celery seed
4. Triscuit
5. Wee cream puffs or choux paste
6. Toasted buttered puffed wheat or cornflakes
7. Bread cubes or almonds dipped in Parmesan cheese and toasted
8. Lemon slices, plain or with clove
9. Sliced hard cooked egg
10. Tiny diced beet in consommé
11. Thin cucumber slices unpeeled in ice cold borscht
12. Diced avocado in consommé

Fruit Garnishes

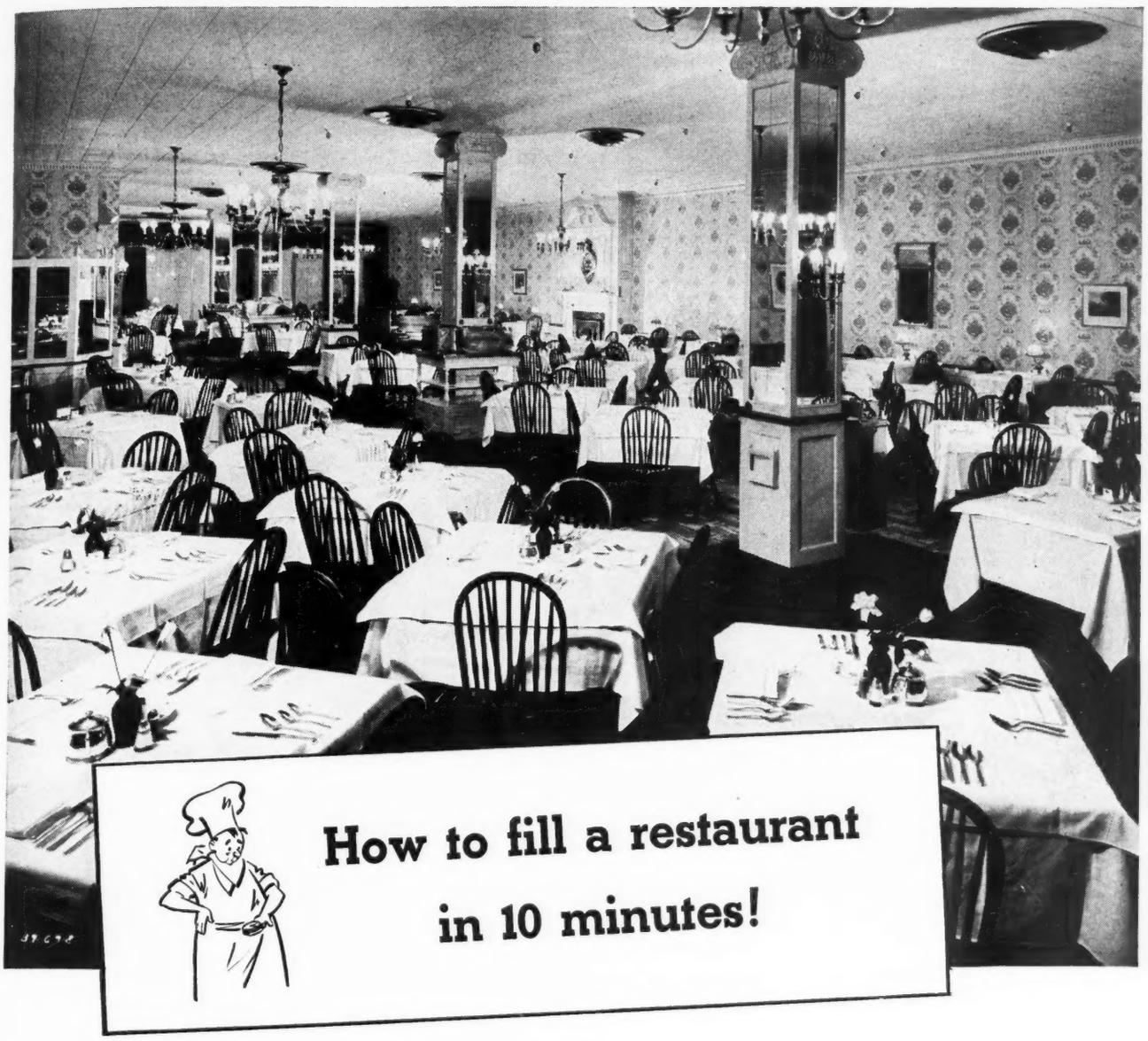
1. Crescents of honeydew or cantaloupe with ball of lime sherbet
2. Shining red apple cup filled with lemon ice. Top with glacé cherry and angelica.
3. Tart fruit juices tinted to pick up a like color on the tray
4. Tomato juice cocktail with chopped chives on top or finely chopped celery and tarragon leaves

Relishes

1. Tiny cream cheese roses, tubed through a pastry bag, with a dot of color in center and little watercress at each side make a lovely relish plate, particularly when served with large ripe olives.
2. Cut ripe olives as you would a radish rose and insert a thin slice of radish or carrot in the gashes. Usually one on an individual plate of assorted relishes is enough.
3. Cut radishes in swirls, gashes or long slender petals. A little decoration looks better than too much. Leave any nice green leaves attached to the radishes and be sure to keep them in ice water for an hour to open.
4. Curl celery stalks in ice water.
5. One of the simplest and most attractive relish plates is made with a radish flower on cress in the center of the plate, with a fringe of celery around it.
6. Cut a small circle out of the center of a spiced carrot ring, watermelon pickle ring or cantaloupe ring. Fill with cream cheese, pimiento or cross section of ripe olive cut to fit. Centers cut with fancy cutters are good looking but take lots of time and patience.
7. Keep pickled carrots and beets cut in fancy shapes and balls made up all the time. A spoonful will accent a desired color on relish and hot plates.

Interesting Salads

1. A thin slice cut across a stalk of celery and molded into the bottom of a jellied salad makes an attractive flower. On top of the celery place a bit of cress, which provides a dark background to accent the celery when the salad is unmolded.
2. Pomegranate seeds as flower petals are attractive for jellied salads. Cress serves as background here.
3. Needle-like slivers of raw carrot and orange lend an exotic flavor to green salads.



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But the fact still remains that ten minutes after the start of the popular lunch and dinner hours, the restaurant above—the Harding Colonial Room on Wabash Ave., Chicago—*is* filled up. And Ken Williams, vice-president of the Harding Restaurant and Hotel organization, has something to say about Birds Eye's share in the glory:

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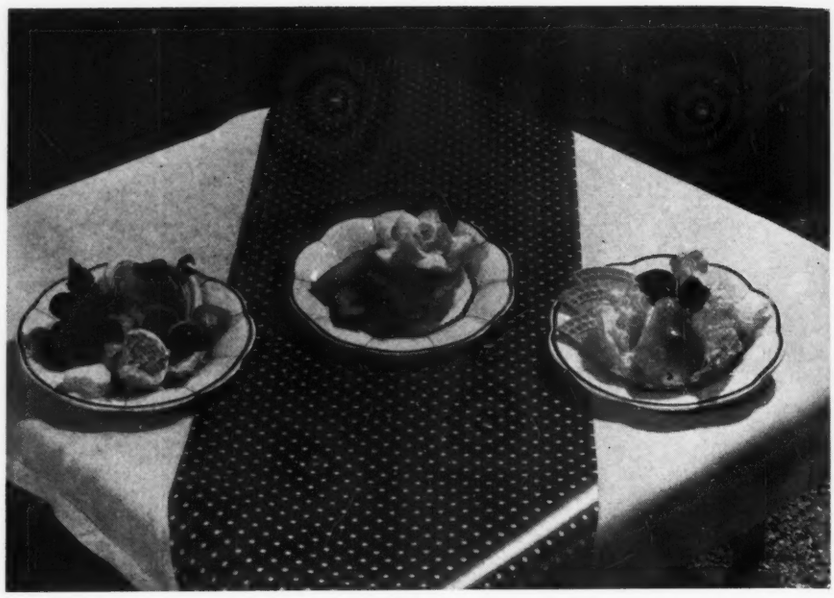
4. Oiled rose leaves give a good light and dark contrast and provide the finishing touch to some fruit salads.
5. Tomato and cheese aspics are attractive and delicious. They are made by molding a thin layer of tomato aspic, with another layer of jellied cream cheese (with or without chives) on top. When rolled as a jelly roll and sliced, it provides a striking accompaniment to a tossed green salad.
6. An unusual green salad is made by thrusting French endive or the hearts of romaine through a scalloped beet ring. A thin ring of pepper may be used with the beet, if the diet permits.

Garnished Vegetables

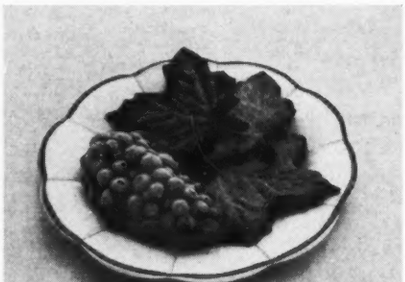
1. Tiny croutons, plain or with cheese, on cauliflower, broccoli, or served in a hollow tomato or onion
2. Put a purée of peas or potatoes or a mixture of both around the edges of casserole dishes.
3. Try shredding beets raw and then cooking.
4. Horseradish in whipped cream is a delicious sauce for spinach molds or beet dishes.
5. Horseradish added to Hollandaise sauce
6. Chopped chives on potatoes instead of parsley
7. Creamed carrots garnished with hard cooked eggs and chives

Dessert Garnishes

1. Lime or raspberry jelly cubes on floating island
2. Half apricot or small fruit as garnish for simple tapioca puddings
3. Dust the whipped cream on chocolate and spiced desserts with a little cinnamon or nutmeg. Chocolate whipped cream makes a nice change and is delicious as a topping for spice cakes.
4. Shredded toasted almonds, on white cream tarts and pies, cakes and ice creams
5. Candied orange peel sprinkled over the white frosting of an angel food or orange sunshine cake (Try orange peel shreds in fruit compotes.)
6. Glacéd fruits and angelica used with cakes and jellied desserts as decorations for baked custard dessert mixtures
7. Make a simple coupe of a fruit cup by adding a small ball of fruit ice just before serving.
8. An attractive simple jelly dessert is made by putting a red blush on the side of an apricot or peach and then molding in a fairly thin lemon jelly.



Above, left: Cold Plate, containing grapes, celery hearts, stuffed watermelon rind, ripe olive and carrot flowers, curried egg, cheese heart; center: Gardenia Salad, made of molded cream cheese petals on pineapple and cross-section slice of lettuce and served on Melba toast strips; right: Pear Salad Naturelle consisting of stuffed tinted pear halves. Below: Grape mousse, molded, with cookie leaves made of sandtart mixture.



9. Use grape leaves and nasturtium leaves under fruit. Mint leaves, plain or sugared, are attractive and delicious.

Entrées and Meats

1. Serve hot ripe olives on cress as a garnish for meat or entrée.
2. Broiled fresh, canned or dried fruits with meats
3. Shredded browned almonds as a garnish for sweetbreads, chicken dishes and scallops
4. French fried onion rings or French fried mushrooms make a good steak garnish.
5. A red jelly (molded in a 1 ounce glass) and rolled in fine pistachio nuts makes a lovely garnish for the Christmas meat.
6. A small half orange broiled, with a spoonful of Bar-le-Duc in center, is delicious as a garnish for lamb or duck.
7. Quartered red apples and quartered oranges, unpeeled and baked together, make a good accompaniment for any game.
8. Serve open hamburger sandwiches with Bermuda ring on half a bun; leaf of lettuce with tomato slice on other half.
9. Unusual and delicious combinations can be made by using the skewer and serving *en brochette*. Try alternating veal, mushroom and apricot.

Miscellaneous Garnishes

1. Sliced pickled walnuts are good with salads, meats and appetizers.
2. Sliced stuffed olives are good added to gravies, salads or French dressings. Ripe olives are good used in the same way.
3. Bar-le-Duc is expensive but a little goes a long way and it is delicious as a meat accompaniment or with a mild cheese. One of our nicest dishes is made by cutting a fairly large heart of cream cheese. A smaller heart is cut out of the center and the cavity filled with Bar-le-Duc. Currant jelly could be used as a substitute. So could wild strawberry jam or guava jelly. Serve with crackers.
4. Simple sandtart mixture cut with a leaf cutter and brushed with an egg wash makes an attractive and a palatable cookie.

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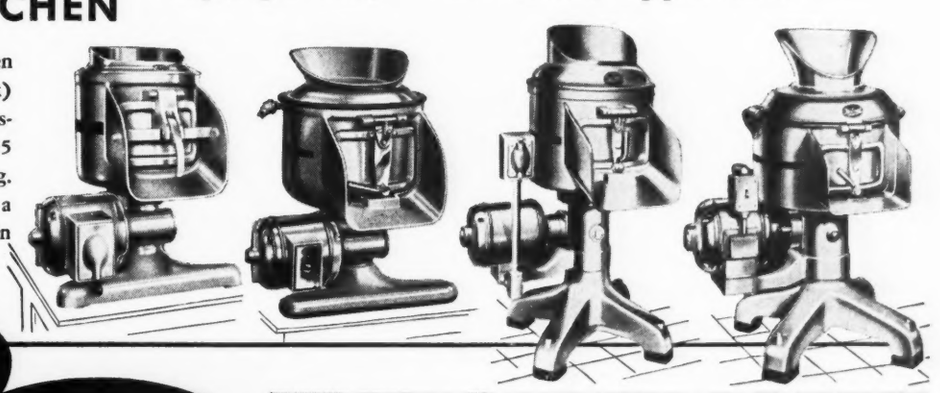

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April Menus for the Small Hospital

Elizabeth W. Hayward
Dietitian, Las Encinas Sanitarium, Pasadena, Calif.

	Breakfast		Luncheon or Supper				
Day	Fruit	Main Dish	Soup or Appetizer	Main Dish	Vegetable	Salad or Relish	Dessert
1.	Peeled Apricots	Bacon, Eggs Berry Muffins		Turkey à la King on Toast	Broccoli, Hollandaise Sauce	Stuffed Cherry Salad	Vanilla Ice Cream, Chocolate Sauce
2.	Baked Apple	Bacon, Eggs Coffee Cake	Cream of Tomato Soup	Hominy With Cheese and Bacon	String Beans	Cooked Fruit Salad, Peach Jam	Grape Sago With Whipped Cream
3.	Fresh Pineapple	Bacon, Eggs Raisin Toast		Broiled Sweetbreads, Apple Slices	Waffle Beets	Fresh Fruit Salad	Pecan Marguerites
4.	Sliced Oranges	Bacon, Eggs Doughnuts	Pumpkin and Lima Soup	Spanish Rice, Link Sausage	Baked Zuchini	Lettuce, Thousand Island Dressing	Strawberry Shortcake, Whipped Cream
5.	Prunes	Bacon, Eggs Corn Muffins	Split Pea Soup	Chicken Soufflé, Mushroom Gravy	Cut String Beans	Celery Hearts	Pineapple Upside-Down Cake
6.	Rhubarb	Scrambled Eggs With Tillimook Cheese Coffee Cake		Baked Calf's Liver, Tomato Sauce	Creamed Onions, Green Peas	Sliced Orange and Coconut Salad	English Toffy Ice Cream
7.	Half Grapefruit	Bacon, Eggs Raisin Toast		Salmon Timbales, Creamed Peas	Chopped Spinach	Fresh Fruit Salad	Apple Pie With Cheese
8.	Sliced Strawberries and Bananas(frozen)	Eggs and Sausage Apricot Jam Cake	Chicken Soup	Rice Cakes, Maple Syrup	String Beans	Grape and Mandarine Salad	Grape Nut Custard
9.	Fresh or Canned Figs	Bacon, Eggs Orange Rolls	Lentil Soup	Lamb Curry With Rice	Spinach	Raw Carrot and Raisin Salad	Ice Cream, Fruit Sauce
10.	Half Grapefruit	Bacon, Eggs Muffins		Beef and Vegetable Pie	Brussels Sprouts	Hearts of Artichoke Salad	French Apple Cake, Lemon Sauce
11.	Apricots	Bacon, Eggs, White Corn Muffins	Crab and Tomato Bisque	Baked Beans, Brown Bread	Creamed Celery	Peach Salad	Cheese Cake Pie
12.	Prunes	Bacon, Eggs, Berry Jam Biscuits	Chicken Liver Relish	Fresh Asparagus on Toast, Egg Sauce	Succotash	Pineapple and Cottage Cheese Salad	Chocolate Roll
13.	Royal Ann Cherries	Poached Eggs on Triscuits	Fruit Cocktail	Cube Steaks	Creamed Onions	Julienne Vegetable Salad	Butterscotch Pecan Ice Cream
14.	Baked Apple	Eggs on Holland Rusk in Cream Hot Cross Buns		Baked Lamb Patties or Fillet of Red Perch	Braised Whole Carrots, Cauliflower	Finger Pineapple Salad	Raspberry Ice, Almond Shortbreads
15.	Citrus Fruit Cup	Bacon, Eggs Cream Toast		Ham Soufflé, Pineapple Ice	Corn Cake With Honey, Spinach	Jellied Orange and Avocado Salad	Rhubarb-Banana Betty, Hard Sauce
16.	Whole Peeled Apricots	Bacon, Eggs, Hot Cross Buns	Belgian Soup	Rice and Cheese Omelet	Macedoine Vegetables	Pineapple Ring Salad	Jellied Orange Juice, Chocolate Cookies
17.	Prunes	Waffles, Syrup Sausage Patty		Liver and Bacon, Onion Ring Garnish	Harvard Beets	Raw Vegetable Salad Bowl	Fresh Applesauce, Gingerbread
18.	Baked Apple	French Toast and Bacon	Grapefruit Au Sherry	Corned Beef Hash, Poached Egg	Fresh Peas	Cooked Vegetable Salad	Lemon Pie
19.	Fresh Prune Plums	Bacon, Eggs Coffee Cake		Chicken Cadillac With Asparagus	Browned Parsnips	Lettuce and Orange Salad	CoffeeBavarian Cream
20.	Baked Apple	Finnin Haddie, Peach Jam Biscuits		English Beef and Kidney Pie	Succotash, Beet Greens	Fresh Pineapple and Date Salad	Vanilla Ice Cream
21.	Canned Grapefruit	Bacon, Eggs Corn Muffins		Mushrooms in Cream on Toast	Mixed Greens, Glazed Tomato	Peach and Cottage Cheese Salad	Date Torte, Whipped Cream
22.	Half Grapefruit	Scrambled Eggs With Ham, Doughnuts		Spanish Rice, Bacon, Spiced Prunes	Cauliflower, Yellow Squash	Tomato-Lettuce Salad Bowl	Apple Crisp, Jack Cheese
23.	Preserved Nectarines	Bacon, Eggs Hot Biscuits, Honey	Fresh Clam Chowder	Assorted Sandwiches	String Beans	Pineapple and Cottage Cheese Salad	Angel Charlotte Russe
24.	Sliced Orange	Bacon, Eggs Oatmeal Muffins		Spaghetti With Meat Balls	Spinach, Creamed Oyster Plant	Colossal Olives	Cherry Cobbler
25.	Freestone Peaches	Bacon, Eggs Orange Rolls		Egg Cutlets, Broiled Green Tomato	String Beans	Colorado Celery Hearts	Strawberry and Banana Shortcake, Whipped Cream
26.	Rhubarb	Eggs and Sausage Raisin Toast		Vegetable Loaf, Cream Sauce	Diced Beets	Tuna and Celery Salad	Cream Cheese, Crackers and Spiced Figs
27.	Applesauce	Bacon, Eggs Berry Muffins		Baked Lamb Chops	Fresh Lima Beans, Spinach Loaf, Hollandaise Sauce	Edgewater Beach Salad	Apricot Pie à la Mode
28.	Baked Apple	Bacon, Eggs Cream Toast		Three Layer Cream Cheese and Jelly Sandwich	Asparagus Tips	Fresh Tangerine and Banana Salad	Baked Pear, Whipped Cream
29.	Frozen Raspberries	Bacon, Eggs Coffee Cake	Fruit Cocktail	Chipped Beef Pudding	Fresh Peas	Tomato and Broccoli Salad	Pineapple Ice-Box Cake
30.	Papaya Melon	Bacon, Eggs Coffee Rolls		Tomato Stuffed With Chicken Salad, Potato Chips	Dainty Pearl Corn, Escalloped Eggplant		Cherry Upside-Down Cake, Whipped Cream

Recipes will be supplied on request by The Modern Hospital, Chicago. Space precludes listing of cereals, several varieties of which are always offered for breakfast.

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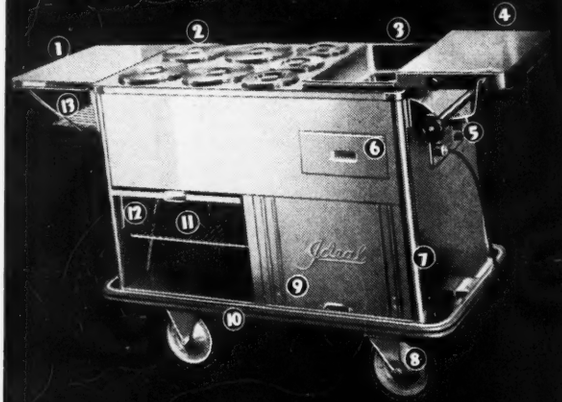

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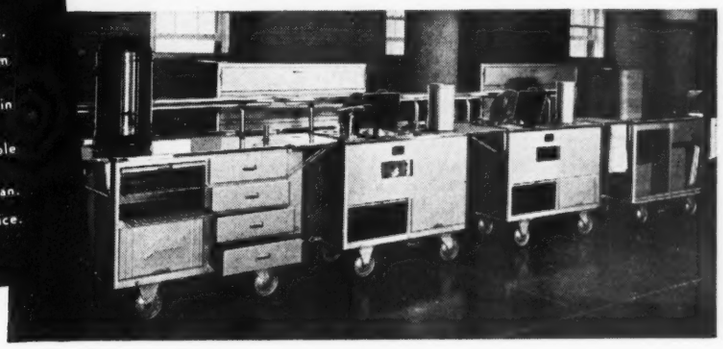


Disposal of Obsolete Drugs

FRED R. BERGER

THE determination of when a drug shall be classified as obsolete and when it shall be eliminated from the stock of the hospital drug room is a problem that frequently confronts the hospital pharmacist.

The term "obsolete," as it is so frequently applied to certain merchandise on the shelf, includes unused drugs in many references to the subject. It is my feeling that a drug should not be termed obsolete until such a time as its manufacture has been discontinued. There are, however, many items that fail to move, although the product by that name may still be manufactured and may enjoy a successful sale elsewhere.

These items rather than being termed "obsolete" should be classified as "unused" or as "old stock." Old stock arises primarily from two sources: (1) the purchase of items that have only a passing fancy and (2) the purchase of too large a quantity at the outset coupled with a rapidly sinking decline of demand after the product has been in use for a few months.

The pharmacist must plan his buying to keep the supply in such quantities that there will be as little old stock as possible. As his attention is called to a new preparation, his first thought should be of the merits of the preparation.

At the Indiana University Medical Center it has been the policy to refer new preparations to the chief of staff in each of the services before the item is purchased as a stock item. The next consideration is whether it is advisable to place a quantity order because of special discounts or to buy a small quantity until a time when repeated calls justify large orders.

Personal experience leads us to believe that small initial orders, even though they result in a greater unit cost and even though there is intense enthusiasm of the staff for the product, leave less dead stock on the shelves. However, in instances in which a quantity of a certain product has accumulated over a period of time, is still in the original container and is in a salable condition, a substantial salvage may be made by exchange for other products manufactured by the same company.

In hospitals similar to those of the Indiana University Medical Center in which the interns and residents, together with voluntary visiting staff members, present a periodically changing personnel, it is advisable to consult with them frequently as to the nature of medications most desired so as to ensure an adequate stock of frequently used drugs and at the same time to keep to a minimum the accumulation of old stock.

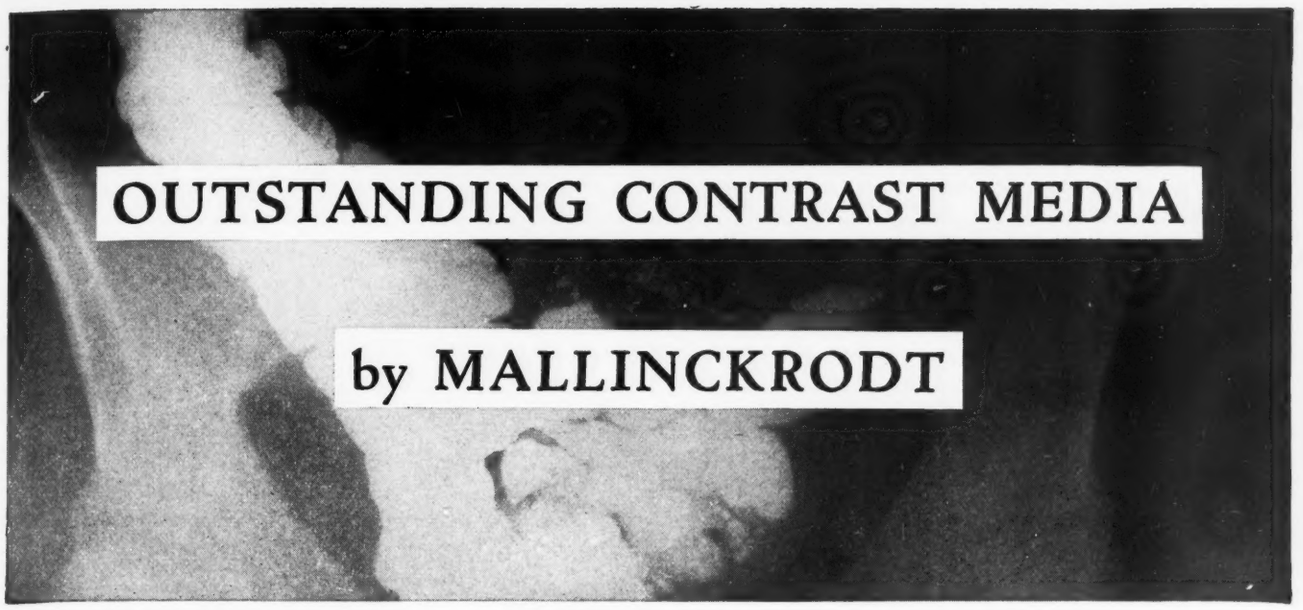
The medical staff frequently is in a position to assist the druggist if it is advised of the presence of quantities of unused drugs on the shelf. This comes about through instances in which more than one type of drug serves the same purpose. It has been our policy when a slow-moving stock item is nearly completed to check with the head of the department to determine the advisability of reordering. In some cases in which the need for the particular type of drug is not of an emergency nature, it is often felt advisable to discontinue the item as a stock item, since the drug may be purchased in a small quantity if a specific demand arises at a later date. The types of preparation on which manufacture has been discontinued and which have been classed as obsolete may in some instances be disposed of in a similar fashion. If the item is a galenical and is still in a usable condition, the members of the medical staff may find a use for it in its existent form or combined with some other drug or preparation.

Outdated biological preparations that are not returnable may be used in research laboratories as cultures for experimental work when such research is connected with the hospital.

It is only when these methods of disposal have failed that the drugs must be destroyed.

A great portion of the problem may be avoided by intelligent planning, moderate purchasing and by close cooperation between the pharmacist and the medical staff.

Mr. Berger is the pharmacist at Indiana University Medical Center.



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PROTECTING THE POTENCY OF YOUR PRESCRIPTIONS SINCE 1867

Logic in Prescription Pricing

S. W. MORRISON

THE subject of prescription pricing is one that has been discussed for many years by retail pharmacists. There is no agreement and probably never will be as to what the pharmacist should get as remuneration for his services. At the last convention of the American Pharmaceutical Association prescription pricing was discussed.

Many methods for pricing prescriptions have been proposed and many modifications and different schemes have been recommended. Attempts have been made by national and state pharmaceutical associations to obtain some uniformity in prescription prices but without much success. Hospital pharmacies, like the commercial stores, are using many different methods for determining prescription prices.

Many factors in pricing alter the final figure; among these are: (1) variation in the cost of drugs owing to the quantity purchased; (2) variation in the proportion of overhead expenses to total sales, and (3) differences of opinion regarding the cost of compounding (professional services).

Can Pay Its Own Way

Hospital pharmacies should be managed and operated in the same way as a retail prescription pharmacy and, if that is done, there is no reason why any hospital pharmacy should not be a profitable section of the hospital administration. Overhead expenses should be considered and operating costs tabulated. An accurate record should be kept of the cost of drugs and a mark-up should be determined that will produce a profit, or at least cover all the operating expenses of the department.

Many charity hospitals, of course, make no effort to operate the pharmacy department at a profit or even to cover expenses. Some pharmacies issue prescriptions free to the patient; others charge a nominal fee for all prescriptions, regardless of the cost, and some charge only enough to cover operating expenses.

Mr. Morrison is the chief pharmacist at Research and Educational Hospitals, Chicago.

In some private hospitals the price of prescriptions is about the same as in the commercial pharmacies. Each new order for medication is written on a special blank, taken to the pharmacy, filed and charged to the patient for whom it is intended.

It will be impossible to review all the methods in use for arriving at the prescription price. The National Association of Retail Druggists has a system of pricing that has been widely used; Doctor Secord of Chicago has prepared a schedule for pricing, and many state organizations have submitted methods.

One of the simplest methods is that proposed by Rose of Iowa City. The general scheme consists of three charges: for materials plus professional services plus overhead.

For Materials: Double the cost of material and container, with a minimum charge of 10 cents.

For Professional Service: Charge at the rate of $2 an hour, with a minimum charge of 15 cents.

For Overhead: Charge 12 per cent of the final price of the prescription, with a minimum charge of 10 cents.

Exceptions to this general scheme are as follows:

1. For high priced specialties, add 50 per cent to the cost of the materials. This includes tablets or capsules and the like when they cost 5 or more cents each; liquids and ointments that cost 15 cents or more an ounce, and suppositories that cost 10 cents or more each. To this charge are added the cost of the container, the minimum professional charge and the overhead charge.

2. For broken packages or specialties not covered in the first exception, double the cost of the material and container and add the minimum professional and overhead charges.

3. For original packages of specialties and proprietaries, add 50 per cent to the cost and minimum professional and overhead charges.

4. For such preparations as liver extract, insulin and vitamin products, use "fair trade" prices and add the minimum professional service charge.

As a professional service charge, the following scheme is suggested. For all prescriptions make a minimum charge of 15 cents for one ingredient. Add 5 cents for each additional ingredient and then add a compounding charge as follows: capsules, 20 cents for each dozen; liquids, 10 cents; ointments, from 15 to 25 cents; powders, 25 cents for each dozen; bulk powder, 15 cents; collyria, emulsions, infusions, suppositories, $1.50 an hour for additional time.

The foregoing method is suggested in the hope that it may serve as a guide. It may be adjusted to fit the needs of a particular hospital pharmacy.

By using some logical method for pricing, whether or not it is the one described, a satisfactory price can be maintained and the hospital pharmacy can be self-supporting.

Clinic Refills

Clinic patients should purchase their drugs at the clinic pharmacy. No prescription should be refilled without written request from the physician. No copies of prescriptions are given to clinic patients in our hospital. Ordinarily the prescriptions should be limited to cover a period of from two to four weeks. When absolutely necessary, refills can be obtained by writing "Refill once," or "Refill twice."

In the chronic illnesses, such as diabetes, pernicious anemia or chronic peptic ulcer, it may be unwise, even unsafe, to discontinue treatment, even for a few days, while the patient is waiting to see the physician. In such cases, prescriptions may be written to read, "Refill for six months." They should contain the diagnosis on the prescription. It is the pharmacist's duty to acquaint the patient well in advance of the termination of such prescriptions. The social service department should be informed of these special patients.—BEATRICE ZEMAN, *pharmacist, Women and Children's Hospital, Chicago.*

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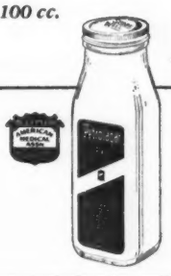

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Pharmacist's Duties

TWO-THIRDS of the hospitals of 100 beds or more in Indiana, Illinois and Wisconsin employ a registered pharmacist, according to data recently compiled by C. B. Jordan, dean of the school of pharmacy, Purdue University, Lafayette, Ind.

Of 159 hospitals replying to a questionnaire, 92 employ a full-time pharmacist and 14 have the part-time services of a pharmacist. Nine of the hospitals employ more than one pharmacist.

The 53 hospitals without registered pharmacists utilize various expedients to have their prescriptions filled. Twenty-two refer them to outside pharmacists, 11 rely upon doctors, 6, upon doctors and nurses and 10 allow nurses to fill prescriptions. The other four use various other persons.

Most of the pharmacists report that they perform some other duties beside compounding and dispensing prescriptions. Forty-two of them perform the usual hospital duties such as stock control, pricing and care of floor baskets. Twelve report that they are expected to teach pharmacy to student nurses. Five are x-ray or laboratory technicians.

Other duties reported by only one or two pharmacists include keeping medical records, bookkeeping and office work, fitting trusses, selling drug sundries, teaching in a college of pharmacy, admitting patients, conducting intern seminars, giving oxygen therapy, supplying surgical instruments or emergency trays, operating a soda fountain or confectionery, being "organist," replenishing fire extinguishers and managing dances and entertainments.

Ninety-four of the pharmacists who replied purchase drugs while 13 do not. Twenty-two pharmacists also purchase supplies for other departments such as surgical, laboratory, x-ray and anesthesia supplies.

About half the pharmacists do not compound prescriptions for patients outside the hospital and some of the others do so only occasionally or for clinic patients only. Most of the pharmacists carry on some manufacturing of preparations, 21 per cent on a small scale and 52 per cent on a "considerable" or large scale.

In the 43 Catholic hospitals that reported, 81 per cent employ a registered pharmacist, all but two of them being employed full-time. All except one of the 35 pharmacists in these hospitals buy the drugs and eight of them also purchase for other departments.

"I was quite surprised to note," Dean Jordan comments, "that only 79 per cent of the registered pharmacists are purchasing the drug supplies for their hospitals. Surely a qualified pharmacist should know more about drugs, from the standpoint of purchase, than anyone else connected with a hospital.

"I have come to believe from this survey that hospitals are not using to the fullest extent the talents and training of their pharmacists. I doubt not that the pharmacists are, in many cases, responsible for this. I have seen pharmacists who believe that their only service is to be done in the drug room and who purposely avoid other duties. If pharmacy is to develop satisfactorily in hospitals, the pharmacists should make themselves just as valuable as possible to the management. Many small hospitals, those of from 50 to 100 beds, can well afford the services of a pharmacist if he serves in all capacities for which his training fits him.

"Many hospital pharmacists do not come into contact with the detail men of large manufacturing pharmacists. While detail men sometimes talk about products of little interest to a particular pharmacist, some of these men have excellent information regarding new and valuable products. The discerning and sophisticated pharmacist will have no difficulty in selecting what he wants and sending the man on his way. Physicians often want information regarding some new product, either proprietary or nonproprietary, and it is the pharmacist's duty to supply that information. This he cannot do if he is out of touch with drug manufacturers."

NOTES AND ABSTRACTS

By Carl C. Pfeiffer, M.D., Department of Pharmacology
University of Chicago

Amphetamine Sulfate (Benzedrine)

• This potent stimulant of the central nervous system, introduced by Alles, has been found useful in medicine in the treatment of various functional depressed states. Its greatest usefulness has been in the treatment of narcolepsy.

Since its introduction benzedrine has been advocated by various authors for spastic colitis, migraine, idiopathic hypotension, alcoholism, postencephalitic parkinsonism, persistent hiccough, epilepsy (with phenobarbital) and, as a household remedy or "pep pill," to be kept in the medicine cabinet for emergency use.

It should be emphasized that there is no drug substitute for physiologic rest, and many subjects report a feeling of greater depression when benzedrine is discontinued.

It should also be emphasized that the 10 mg. pill is an excessive dosage for most normal individuals. Many subjects obtain a marked stimulation from 2.5 mg. (¼ tablet), and toxic symptoms have appeared with dosages of from 10 to 20 mg.

Loman and Dameshek found that benzedrine in relatively large doses had a prolonged elevating effect on the normal blood pressure. At least one patient has been rejected on medical examination for life insurance because of the elevation of blood pressure caused by benzedrine. On reexamination without benzedrine his blood pressure was normal, and he was accepted for insurance.

If the general populace starts to substitute benzedrine stimulation for physiologic rest, there will undoubtedly be an increase in the all too prevalent types of functional disease.

Scopolamine

• Bennett, Castle and Waters have recently unraveled the mystery behind morphine and scopolamine anesthesia (twilight sleep). Large doses of morphine alone cause narcosis that may be fatal, but morphine and scopolamine together, if used properly, may produce complete anesthesia with only a slight decrease in respiratory rate.

Working on the normal human being, the minute volume respiration was determined after the subcutaneous

(Continued on page 138)

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Monthly News Review

Vol. 52 March 1939 No. 3

Rappleye's Proposal for New Council Wins Tentative Approval of A.M.A.

The first joint session ever held by the trustees of the American Medical Association with the trustees of the American, Catholic and Protestant hospital associations took place February 14 in Chicago at the time of the midwinter meetings attendant upon the annual congress of the Council on Medical Education and Hospitals.

According to a report in the *Journal of the American Medical Association,* a resolution was prepared and adopted by the representatives of the hospital organizations expressing "to the board of trustees of the American Medical Association their confidence in the leadership of the medical profession in furthering the excellence of medical service and in aiding in the solution of the problems of the distribution and provision of medical care."

Another resolution adopted by the joint meeting expressed gratification on the unanimity of opinion developed concerning many phases of the health problems of the nation achieved by mutual discussion and recommended similar joint meetings in the future.

An even more important development during the midwinter sessions, as reported in the *Journal,* was the decision of the council on medical education and hospitals to recommend to the house of delegates that the association participate in the Advisory Council on Medical Education, Licensure and Hospitals, which is now being formed pursuant to a proposal of Dr. Willard C. Rappleye. The proposed council is designed as an advisory body for the hearing of various problems of mutual concern to those represented. It had previously been approved by the trustees of the American Hospital Association and a committee appointed with power to act.

The following representatives have been suggested: three each for the Association of American Medical Colleges, American Medical Association, American Hospital Association, Federation of State Medical Boards of the U. S. A. and Advisory Board for Medical Specialties; two each for the American College of Surgeons, American College of Physicians and Association of American Universities; one each for the National Board of Medical Examiners, American Public Health Association, Catholic Hospital Association and section N of the American Association for the Advancement of Science.

At its February meeting, the board of trustees of the A. H. A. authorized an appropriation of $2000 to the council on public education for exploratory work looking toward the development of a public relations program for the association. For the time being at least, the suggested integration of the public relations program of the council on hospital care insurance with that of the council on public education is being held in abeyance.

The usual winter conference of presidents and secretaries of state and regional hospital associations also met in Chicago for discussion of problems of legislation, membership, finances and similar topics of joint interest. There was a large attendance from nearly all parts of the country.

Emeritus Staff Appointed

Twelve physicians have been appointed to the first emeritus staff of the Deaconess Hospital, Evansville, Ind. They were guests of honor at a dinner given on February 21 to celebrate the forty-seventh anniversary of the hospital and were presented with gold keys, designed under the direction of Albert G. Hahn, administrator, as a symbol of appreciation of their services to the hospital.

Welfare Island Preview

Fifteen hundred physicians, social workers and nurses under the guidance of uniformed nurses recently inspected the new Welfare Island Hospital for Chronic Diseases, New York, which is rapidly nearing completion. The construction of the hospital, which is actually five chevron shaped buildings connected by a "stem," is finished and only the purchase of equipment remains. It is expected that the institution will be opened around July 1. Approximately 800 patients will be brought from other city institutions when the hospital opens.

Social Security Should Be Given Hospital Employes, Altmeyer Tells Congress

Unemployment as well as old age insurance should be extended to employes of voluntary hospitals and other nonprofit charitable agencies in the opinion of Arthur J. Altmeyer, chairman, Social Security Board, who testified before the ways and means committee of the U. S. House of Representatives on February 1.

"Identical recommendations are made for the clarification of the employe-employer relationship and for the inclusion of nonprofit organizations and federal instrumentalities such as national banks," he stated. "The board sees no great advantage in attempting to bring in federal employes. And here, as in old age insurance, constitutional difficulties appear to make it impossible to bring state and local government employes under the federal laws."

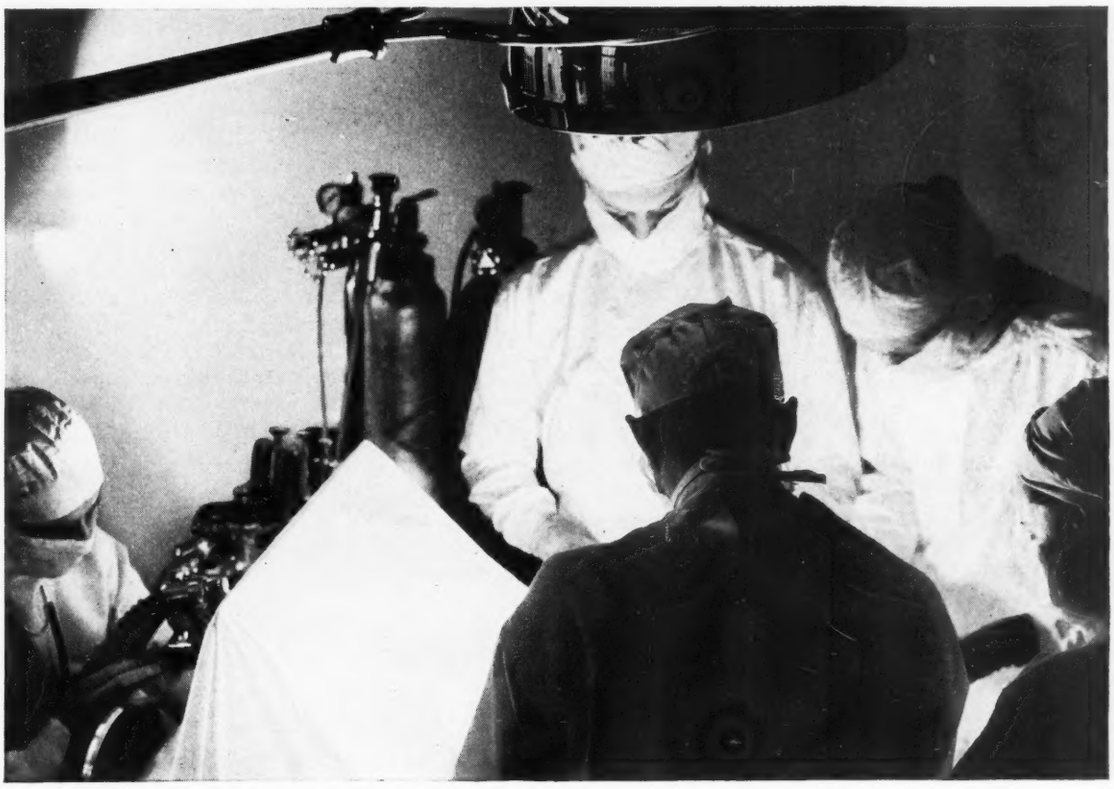
Medical Records Discussed at New Jersey Hospital Session

A physician who does not complete a medical record within a month is automatically suspended from the staff at Orange Memorial Hospital, according to Dr. Linn Emerson, chairman of the record committee, who was one of the speakers in a symposium on medical records at the winter conference of the New Jersey Hospital Association. The meeting was held at the Newark Beth Israel Hospital on February 8.

It is as much the duty of a physician to write his medical records as to prescribe and give medical treatment to his patients, stated Margaret Ritchie, president of the Association of Medical Record Librarians of New Jersey.

Dr. Max Danzis, president of the medical staff of the Newark Beth Israel Hospital, countered by pointing out that many delinquencies were the result of failure of the hospital to supply sufficient trained personnel to help the physician take care of the onerous clerical work required in making good medical records.

About 160 administrators, physicians, nurses, librarians, social service workers and other hospital persons attended the meeting.



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Voluntary Medical Insurance for Low Income Groups Proposed in Missouri

A state-wide plan for voluntary medical care insurance for low income groups has been devised by a committee of the Missouri State Medical Association and was outlined by Dr. Carl F. Vohs, chairman of the committee, at a meeting of the Missouri Hospital Association at Columbia, February 7 and 8.

It is proposed that the Group Hospital Service, Inc., of Missouri be the agent for acquisition of subscribers to the plan and that the physicians be compensated on a unit basis, the value of the unit depending upon the amount of money remaining after meeting necessary expenses. It is suggested that 10 per cent of the receipts be held in reserve for protection in epidemics, prolonged cases, maternity care and chronic cases. Administrative costs are not to exceed 10 per cent.

The state is to be tentatively divided into three types of areas with three levels of payment and three top income limits for subscribers. In the metropolitan areas of 100,000 population or more, the service is to be available only to those with incomes under $1800 and the premiums are to be $3 for an entire family, $2.50 for a man and wife and $2 for a single individual (whose income must not exceed $1200). In urban areas of from 5000 to 100,000 population, the upper income limits are $1200 ($1000 for a single person) and rates are $2 for an entire family or for a man and wife, and $1.50 for a single person. In rural areas the upper income limit is set at $800 and the premium is $1.50 for a single person or for a whole family.

Control of the plan is to be vested in the state medical association with a lay board in an advisory position. Medical service is to cover everything except industrial injuries, accidents covered by other types of insurance and illness arising from chronic alcoholism and drug addiction. Obstetrics will be covered after ten months and a limitation will be drawn up to cover the amount of care that can be given each month for chronic cases.

The plan is the result of almost five years of study by the committee.

Coming Meetings

March 9-11—New England Hospital Association, Hotel Statler, Boston.
Mar. 15-17—Sectional Meeting, American College of Surgeons (Maryland, Virginia, District of Columbia, New Jersey, Delaware, Eastern Pennsylvania, North Carolina, South Carolina), Lord Baltimore Hotel, Baltimore.
Mar. 22-24—Sectional Meeting, American College of Surgeons (Indiana, Illinois, Michigan, Ohio, Iowa, Wisconsin), Indiana Claypool Hotel, Indianapolis.
March 23—Nebraska Hospital Assembly, Blackstone Hotel, Omaha.
Mar. 29-31—Sectional Meeting, American College of Surgeons (Manitoba, Alberta, Saskatchewan, Northern Ontario, Minnesota, North Dakota, South Dakota), Fort Garry Hotel, Winnipeg, Man.
April 11-13—Ohio Hospital Association, Deshler Hotel, Columbus.
April 13-15—Southeastern Hospital Conference (Florida, Georgia, Alabama, Mississippi, Louisiana), Roosevelt Hotel, Jacksonville, Fla.
April 20-22—Carolinas-Virginia Hospital Conference, Roanoke Hotel, Roanoke, Va.
April 20-21—Mid-West Hospital Association, Hotel Eastman, Hot Springs, Ark.
April 21-22—Texas Hospital Association, Fort Worth, Tex.
April 24—National League of Nursing Education, New Orleans.
April 24—Board of Hospitals, Homes and Deaconess Work of the Methodist Episcopal Church, Kansas City, Mo.
April 24-26—Iowa Hospital Association, Cedar Rapids.
April 26-28—Hospital Association of Pennsylvania and Pennsylvania Association of Nurse Anesthetists, Bellevue-Stratford Hotel, Philadelphia.
May 3-5—Tri-State Hospital Assembly, Stevens Hotel, Chicago.
May 3-5—Ontario Hospital Association, Royal York Hotel, Toronto, Ont.
May 8—Mississippi Hospital Association, Gulfport.
May 15-19—American Medical Association, St. Louis.
May 17-19—Hospital Association of New York State, Hotel Pennsylvania, New York City.
May 25-27—Minnesota Hospital Association, St. Paul.
June 1-4—National Executive Housekeepers Association, William Penn Hotel, Pittsburgh.
June 5-9—Catholic Hospital Association, Milwaukee.
June 8-10—New Jersey Hospital Association, Hotel Dennis, Atlantic City, N. J.
June 15-17—Institute for Directors of Schools of Nursing, University of Chicago, Chicago.
June 18-24—American Association of Medical Social Workers, Buffalo, N. Y.
June 22—Manitoba Hospital Association, Winnipeg, Man.
June 25-28—American Sanatorium Association, Boston.
July 31-Aug. 12—Southern Institute for Hospital Administrators, Duke University, Durham, N. C.
Aug. 13-15—National Hospital Association, New York City.
Aug. 27-Sept. 1—American Dietetic Association, Ambassador Hotel, Los Angeles.
September 5-16—Institute for Hospital Administrators, University of Chicago, Chicago.
Sept. 11-15—American Congress on Obstetrics and Gynecology, Cleveland.
Sept. 19-23—International Hospital Association, Toronto, Ont.
Sept. 21-22—Canadian Hospital Council, Toronto.
Sept. 24-25—American College of Hospital Administrators, Toronto.
Sept. 25-29—American Hospital Association, Toronto.

Peters and Fishbein Debate Medical Care at C.H.C. Banquet

Sharp differences of opinion regarding the future of medical practice in the United States were voiced by Dr. John M. Peters of New Haven, Conn., secretary of the Committee of Physicians for the Improvement of Medical Care, and Dr. Morris Fishbein, editor, *Journal of the American Medical Association,* at the third annual dinner of the Chicago Hospital Council on January 25.

Doctor Peters indicated a strong feeling that voluntary health insurance will not prove sufficient to solve the present economic problems of medicine and that a compulsory form must eventually be tried. Nevertheless, he favored hospital care insurance for all people above the level of indigency with government aid for those who can only afford to pay part of the premiums involved. He urged a ward service plan and the inclusion of medical benefits in conjunction with hospital care insurance.

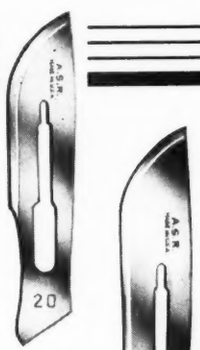
In speaking of the cash benefit system, Doctor Peters said that it is "a travesty upon the ideals of medicine to insist that the ceremony of direct transfer of money from patient to physician preserves the sanctity of personal relations. A cash benefit system does not assure rewards to proficiency and decency; it gives a peculiar advantage to chicanery."

Doctor Fishbein ridiculed the studies made by the federal government and praised the study now being conducted by the local and state units of the American Medical Association. He reported that at least 300 medical service plans are in operation in the United States and that physicians are participating in all of them. He urged great caution in starting any new plans, however.

Lyon Heads Essex County Council

W. Crane Lyon, who has been active in the hospital field for several years, was recently appointed executive secretary of the Hospital Council of Essex County, Newark, N. J. The council, which has moved into new quarters at 744 Broad Street, is developing a program of activities for the coming year. Several meetings of the administrators of member hospitals have been held and studies are being made on group purchasing, a bureau of overdue accounts and uniform procedure as to visiting hours and the admission of patients.

SPECIALISTS IN PRECISION EDGES SINCE 1902



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Hospital Care Executives Agree on Research and Public Education Program

Twenty-five fully approved hospital care insurance plans have agreed to participate in a new program of research and public education and to assess themselves at the rate of one mill per employed subscriber enrolled as of January 1, 1939, to finance this program. This would provide an initial budget of more than $15,000 annually.

Such is the outstanding news from a month that has been packed with important developments on the hospital care insurance front.

Nearly 100 plan executives meeting in Cleveland on February 8 to 10 as guests of John A. MacNamara also decided to appoint several new committees to carry on various studies. Chairmen of the new committees are Sherman D. Meech, Rochester, N. Y., accounting and office procedure; E. A. vanSteenwyk, Philadelphia, actuarial data; Dr. Lewis E. Jarrett, Richmond, hospital relations; Abraham Oseroff, Pittsburgh, legislation; Ray F. McCarthy, St. Louis, rural development, and Mr. McNamara, public education.

It was announced at the Cleveland meeting that approval of newly organized plans will be granted at various times throughout the year after a minimum of six months' activity, the achievement of at least 1000 employed subscribers and the presentation of a favorable financial statement.

Suggests Incorporation

Monsignor Maurice F. Griffin presented to the executives a plan to obtain federal incorporation for hospital care insurance plans. He stated that this idea, suggested by John R. Mannix, had been approved by the joint committee on federal relations of the three national hospital associations. He said that it would encourage the formation of plans, particularly outside the large centers of population, standardize the plans, facilitate reciprocity and continue the benefits to subscribers when they move. Such a corporation would be eligible to enter into a contract with government for services rendered to the relief population, he stated.

In a report on recent developments, C. Rufus Rorem, director of the committee on hospital service, summarized growth during 1938.

New enabling acts for nonprofit hospital care insurance are being seriously considered in all parts of the United States at present. The council on hospital care insurance has drafted a model bill based on the best features of existing acts. New legislation was passed last year in Kentucky, New Jersey and California and is being considered in Indiana, Wisconsin, Michigan, Iowa, Tennessee, Washington, Ohio and South Carolina.

The Massachusetts plan has recently adopted a ward service arrangement to supplement the semiprivate service plan. The rates for membership in the ward service plan are substantially lower than in the regular plan and it is open only to persons earning less than $1000 per year, if single, or up to $2000 per year for a person with four or more dependents. Membership rates are 60 cents per month for a single individual, $1 for a man and wife and $1.25 for a family. The hospitals will be paid for ward service at the rate of $4 per day.

Chicago Group Meets

In Chicago, the Plan for Hospital Care held its second assembly of hospitals that are members of the plan. Dr. Malcolm T. MacEachern cited the Chicago plan as a model for the country because it will admit to membership only hospitals that have met the full approval of the American College of Surgeons. "If hospital insurance plans disregard minimum standards and use substandard or near boarding-house type of hospitals for their clients, then the plans are falling short of their real purpose, *i.e.* to give good hospital care to those who otherwise might not be able to have it."

Standards proposed by Doctor MacEachern are: (1) modern physical plant; (2) clearly stated constitution and rules; (3) carefully selected governing board in supreme authority; (4) competent executive officer; (5) adequate, efficient personnel; (6) organized medical staff of ethical, competent physicians; (7) adequate diagnostic and therapeutic facilities; (8) complete medical records; (9) group conferences of administrative and medical staffs, and (10) humanitarian spirit.

In New York City the Associated Hospital Service received another boost when the United Office and Professional Workers Union, a C.I.O. affiliate, announced a new medical service plan providing for physicians' service and urged all members to obtain hospital care thorough the Associated Hospital Service.

New England Meeting to Have Dr. Mountin as Speaker

Dr. Joseph W. Mountin of the U. S. Public Health Service will lead off the discussion at the annual meeting of the New England Hospital Association which convenes at the Hotel Statler, Boston, for three days beginning March 9. Doctor Mountin will discuss "Government Relationship to Community Hospitals."

Other headline speakers will include James A. Hamilton, administrator, New Haven Hospital, on personnel problems; Dr. Henry M. Pollock, administrator, Massachusetts Memorial Hospital, on nurseries and the newborn, and C. Rufus Rorem, Chicago, on hospital care insurance.

Dr. Elliott P. Joslin of Harvard University will discuss cooperation between physicians and hospitals in the treatment of diabetes. A trustee round table will be conducted by Frank O. Robson of Harrington Memorial Hospital, Southbridge, Mass. Dr. G. Harvey Agnew, president, American Hospital Association, will be the luncheon speaker on March 10. Dr. Malcolm T. MacEachern, associate director, American College of Surgeons, will conduct a round table conference for administrators.

Hospital Association Is Established in Arizona

The latest group to join the Association of Western Hospitals is the newly formed Arizona Hospital Association which held its first meeting in Phoenix last month.

The score or more of delegates who attended elected Dr. C. G. Salsbury, superintendent of Sage Memorial Hospital, Ganado, Ariz., president. Other officers are Sister Idlephonse, superintendent, St. Mary's Hospital and Sanitarium, Tucson, vice president, and Dr. Charles W. Sechrist, superintendent of Flagstaff Hospital, Flagstaff, secretary-treasurer.

Hospital executives of Hawaii have been invited by Gustaf W. Olson, superintendent of Queen's Hospital, Honolulu, in cooperation with a committee, to consider the formation of a territorial hospital association.

Baby to Receive Baby Bond

To celebrate the arrival of the seventeen-thousandth baby, an event which will take place shortly, the board of managers of the Presbyterian Hospital, Chicago, is going to present the newcomer with a $100 U. S. Baby Bond.

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Delaware State Hospital Proposes Unusual Plan to Finance New Buildings

A plan for financing the proposed new building and repair program at the Delaware State Hospital, Farmhurst, Del., without the burden of added taxes, has been suggested by Dr. M. A. Tarumianz, superintendent, in his biennial report.

Doctor Tarumianz suggests that the state issue bonds for $715,000 which, he declares, can be amortized in thirty years at the rate of $23,833 annually. The institution, according to Doctor Tarumianz, can pay the state treasury this sum by increasing its income from paying patients from $76,000 a year to $114,000.

At the present time there are 175 paying patients in the hospital. It is Doctor Tarumianz' contention that, by creating the proposed new facilities, the hospital should be able to collect an additional $38,000 or $40,000 per year from relatives of the present non-paying patients, which will be sufficient to pay the indebtedness and interest as well as to maintain the new buildings.

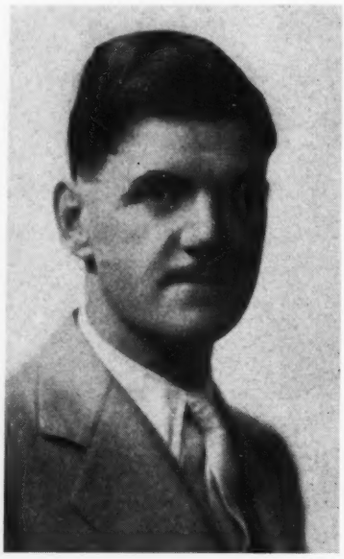
Gifts Totaling $125,000 Received by Wesley Hospital

A gift of $50,000 for the construction of a new nurses' home for the Wesley Hospital, Wichita, Kan., was offered to the institution last summer by J. H. Huston of Wichita, on condition that an equal amount be provided by other friends of the hospital. The additional $50,000 was raised by the middle of November and plans are now rapidly being completed for the construction of the new building.

Another gift to the hospital, $25,000 for the installation of deep therapy equipment, was made known when the will of Mrs. E. H. Middlekauff was probated in January. This gift will make possible the installation of a new x-ray department

Milk Preserved by Freezing

A new method of preserving mother's milk for the feeding of premature infants and those unable to subsist on cow's milk was reported to the American Birth Control League by Mrs. William Darrach, president of the Committee for Maternal Health, Inc., Greenwich, Conn. The Greenwich Maternal Health Center, Mrs. Darrach stated, purchases surplus milk from mothers, has it frozen into wafers and distributes it when needed.



Leonard Shaw, A.H.A. Assistant, Dies of Leukemia

Leonard Shaw, assistant executive secretary of the American Hospital Association, since March 1938, died February 18 of leukemia after a brief illness.

Mr. Shaw, an Englishman by birth, entered upon his hospital career in Canada in 1924 as secretary of the General Hospital at Swift Current, Saskatchewan. In 1930 he was appointed to the Moose Jaw General Hospital as business manager and was given the superintendency of the institution a year later. In 1933 he was made general superintendent of the Saskatoon City Hospital, Saskatchewan, the position he held until he came to the A.H.A.

Mr. Shaw served as editor of the *Canadian Hospital,* the official journal of the Canadian Hospital Council, from 1936 to 1938. He is survived by his wife and a two year old daughter.

Hospital to Have 62 Sides

Grass Valley Memorial Hospital, now being constructed at Grass Valley, Calif., will have 62 "sides" so that patients may get the benefit of sunlight from all angles. The building will be five stories in height and will cost $250,000.

Interns Ask Salary Raise

More than 100 interns in New York municipal hospitals appeared recently before the welfare committee of the city council to urge passage of a bill providing them with salaries of $680 a year in addition to maintenance and a vacation of one month with pay. They now receive $180 a year and vacations of two weeks.

Michigan Joins Tri-State; Program for 1939 Planned

Three leading themes for the annual Tri-State Hospital Assembly to be held in the Stevens Hotel, Chicago on May 3, 4 and 5 were selected at a recent meeting of the program committee with the board of trustees. "The Care of the Indigent Patient in the Voluntary Hospital," "Increasing Hospital Income" and "The Care of the Patient" are the themes for the morning assemblies.

The Michigan Hospital Association has voted to merge its general educational meetings with the Tri-State Assembly, although it will probably continue to have business meetings within its own state. For the current year the Michigan delegates will be guests of the Tri-State Assembly but it is expected that in 1940 they will become an integral part of the organization. A breakfast meeting, to be sponsored by the American College of Hospital Administrators, will be concerned with the problem of education of administrators. A round table discussion on trustee problems will also be a feature of the assembly. A new section is being added this year for hospital architects.

South Carolina to Have Group Hospitalization Plan

The board of trustees of the South Carolina Hospital Association has unanimously endorsed a community plan of group hospitalization being sponsored by the Greenville General Hospital, Greenville, S. C. It is the aim of the organizers to provide hospital care to the low income group at an extremely low cost.

The hospital association is planning to introduce a bill into the state legislature for adding a small amount to motor car registration fees to provide a state fund from which hospitals will be paid for the care of indigent patients injured in automobile accidents.

New Wing Opened at Norfolk

The new $25,000 east wing extension of the Norfolk General Hospital, Norfolk, Va., was opened for public inspection on February 3. The opening was featured by the gift of a week's hospitalization without charge to one of the patients admitted to the hospital between 6 a.m. and 5 p.m. on the opening day. As each patient was admitted, his name was placed in a hat and at the end of the day David Pender, president of the hospital, drew the name of the winner.

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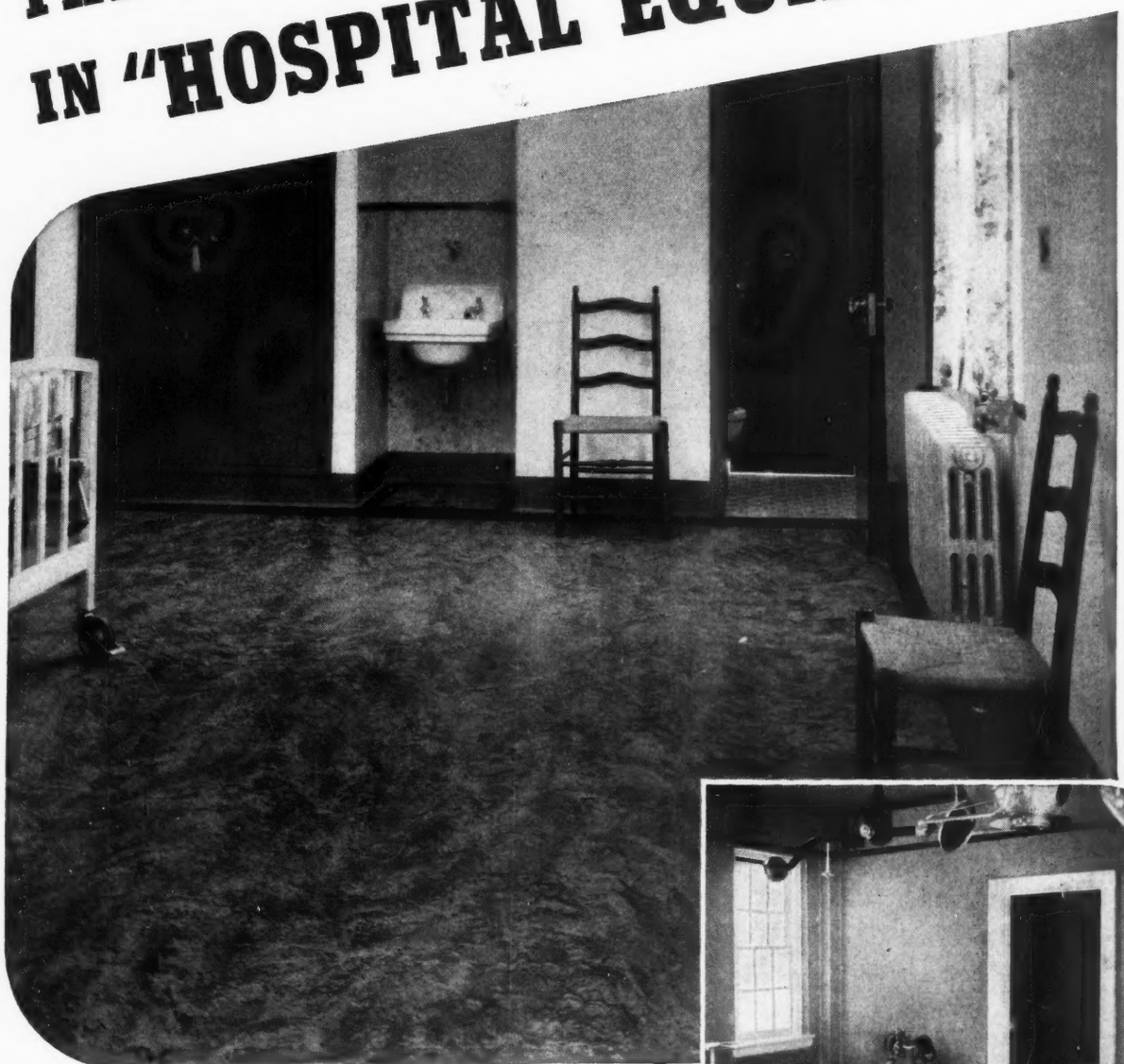
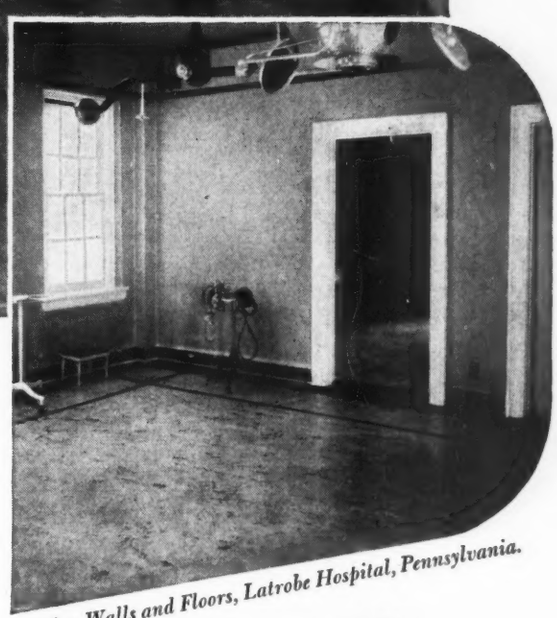


Nairn Floors in Sacred Heart Hospital, Manchester, N. H.



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Names in the News

Administrators

DR. LOUIS H. BURLINGHAM, for twenty-two years superintendent of Barnes Hospital, St. Louis, is resigning his duties on April 1 because of ill health. Doctor Burlingham submitted his resignation a year ago but the board of trustees of the hospital declined to accept it, granting him instead a leave of absence in the hope that he would regain his health. Doctor Burlingham has been active in hospital administration since 1907 when he was first assistant administrator of Massachusetts General Hospital, Boston. In 1912 he went to Peter Bent Brigham Hospital, Boston, as assistant superintendent, holding that position until 1917 when he took over the administration of Barnes Hospital. Since 1922 he has been a member of the editorial board of THE MODERN HOSPITAL.

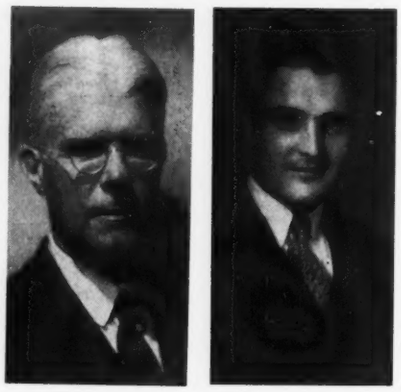
LUCY ABBOTT POLLOCK, administrator of the William W. Backus Hospital, Norwich, Conn., will retire from the hospital on August 1. Mrs. Pollock, who is the wife of DR. H. M. POLLOCK, administrator of Massachusetts Memorial Hospital, Boston, has served as head of the William W. Backus Hospital since 1926. She was recently elected president of the Connecticut Hospital Association.

WALTER K. HARGREAVES has resigned as business manager and assistant superintendent of Highland Park General Hospital, Highland Park, Mich., to assume the superintendency of the Pontiac General Hospital, Pontiac, Mich.

GERTRUDE KRAMER, superintendent of West Baltimore General Hospital, Inc., Baltimore, has resigned effective March 15. She has been associated with the hospital for fourteen years.

DIANA G. MILLIGAN, formerly director of nurses at the Wyoming Valley Homeopathic Hospital, Wilkes-Barre, Pa., has been appointed superintendent of the Rochester General Hospital, Rochester, Pa.

GEORGIA S. GILLIS, former superintendent of the Webster District Hospital, Webster, Mass., has been appointed superintendent of the Fremont Memorial Hospital, Fremont, Ohio. She succeeds MRS. ARDEN E. HARDGROVE, wife of the administrator of the Norton Memorial Infirmary, Louisville, Ky., who held the position three and a half years. Mrs. Hardgrove is retiring from hospital administration.



Left: Doctor Burlingham retires. Right: Mr. Mannix heads Michigan's new hospital care plan.

SUSIE PANNELL, who has served as superintendent of the Southside Community Hospital, Farmville, Va., for two and a half years, resigned recently. MRS. EDYTH Y. RICKMAN, assistant superintendent, is acting superintendent until a successor to Miss Pannell is named.

MRS. ANNA BRUMBACK has been appointed superintendent of the Page Memorial Hospital, Luray, Va., it was announced by the board of trustees. She succeeds the late MRS. M. O. SWARTZ.

DR. GEORGE N. CURTIS has been appointed head of the Salt Lake County General Hospital, Salt Lake City, Utah, succeeding DR. R. J. ALEXANDER.

DR. A. M. LYON, former superintendent of the Institution for the Feeble Minded at Frankfort, Ky., was appointed superintendent of the Western State Hospital, Hopkinsville, Ky.

DR. L. E. YOUNG, superintendent of the McCracken County Sanitarium, Paducah, Ky., has tendered his resignation to take effect April 1.

DR. JOHN F. MCNEILL, assistant superintendent of Matteawan State Hospital, Beacon, N. Y., since 1926, has been appointed superintendent of the State Institution for Male Defective Delinquents, Napanoch, N. Y. Doctor McNeill succeeds to the post made vacant several months ago by the death of JOHN L. HOFFMANN.

PHYLLIS M. WALTER, R.N., for five years night supervisor of Saranac Lake General Hospital, Saranac Lake, N. Y., has been appointed assistant superintendent of the hospital. Miss Walter has been associated with the hospital for six years.

BESSIE M. UPHAM, R.N., has been appointed to the superintendency of Hillcrest Hospital, Pittsfield, Mass., succeeding THELMA B. WARD, who resigned to accept the position of superintendent of nurses at Belmont Hospital, Worcester, Mass. Prior to her appointment to Hillcrest Hospital, Miss Upham served for fourteen years as superintendent of the Huntington Hospital, Huntington, N. Y.

MRS. OPALLE DESJARDIN O'HALLORAN, R.N. was recently appointed superintendent of the Notre Dame Hospital, Central Falls, R.I. She had served as assistant to MRS. BLANCHE PETERSON, the superintendent, until the latter's resignation two months ago. Mrs. O'Halloran was graduated from Memorial Hospital, Pawtucket, R. I.

DR. GEORGE MCL. WALDIE has resigned as medical superintendent of the Copper Country Sanatorium, Houghton, Mich. His resignation is to take effect as soon as a successor is appointed. Doctor Waldie has been head of the sanatorium for twelve years.

AUGUSTUS B. LECOMPTE resigned on February 1 as manager of the Eastern Shore State Hospital farm at Cambridge, Md., a position that he held for twenty-seven years. Mr. LeCompte was the first employe of the State Hospital, having entered upon his duties a year before the buildings were erected. In recognition of his years of service, officers and employes of the institution presented him with a silver flower bowl.

EARL G. ROWLEY has been appointed superintendent of the Homestead Hospital, Homestead, Pa. Mr. Rowley was formerly associated with the Citizens General Hospital, New Kensington, Pa. He is succeeded at Citizens General by JOHN L. BURGAN, who resigned the superintendency of Abington Memorial Hospital, Abington, Pa.

DR. BURTON A. BROWN whose resignation as administrator of the Pierce County Hospital, Tacoma, Wash., was reported last month has reached an agreement with the board of trustees, it was announced, and will continue as head of the hospital.

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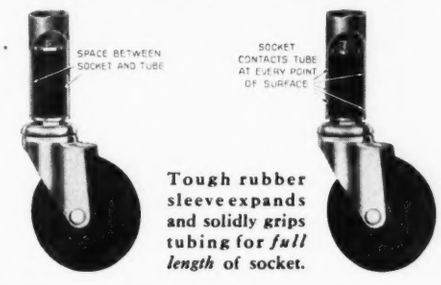

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Department Heads

DOROTHY ROGERS, formerly assistant professor of nursing education at the University of Chicago, has been appointed director of the school of nursing and nursing service at the Presbyterian Hospital, Chicago. She will assume her new position on September 1. Miss Rogers is a graduate of Wellesley College; Teachers College, Columbia University, and the Presbyterian Hospital school of nursing. She has been president of the Illinois League of Nursing Education since 1936. Miss Rogers replaces M. Helena McMillan, founder of the nursing school.

DR. P. M. MORIARITY was elected president of the staff of Mercy Hospital, Springfield, Mass., to succeed DR. JOHN DWYER. DR. W. J. DILLON was elected vice president and DR. MARTIN F. GAYNOR, secretary-treasurer.

KATHERINE A. CULLEN, retiring superintendent of nurses at Worcester City Hospital, Worcester, Mass., was honored at a tea given January 26 by the hospital staff. Among the 300 guests at the tea were graduates of the hospital's training school for nurses. Miss Cullen was presented with a purse of $180.

DR. JOHN E. CANFIELD was elected president of the Herkimer Academy of Medicine and chief of staff of Herkimer Memorial Hospital, Herkimer, N. Y., at the annual meeting of the academy. Doctor Canfield succeeds DR. A. L. FAGAN whose term expires this month.

DR. DRAPER LONG has been named president of the staff of St. Joseph Mercy Hospital, Mason City, Iowa.

Trustees

JULIUS A. BAER, for many years a member of the board of directors of the Jewish Hospital, St. Louis, resigned recently. He was made an honorary director of the hospital for life. HENRY H. STERN was elected as a director to fill Mr. Baer's unexpired term. HENRY PUTZEL, president of the Ethical Society of St. Louis, was elected to the board to fill the unexpired term of the late AARON WALDHEIM.

JOHN P. WILSON, president of the Children's Memorial Hospital, Chicago, and all other officers except the treasurer were reelected at the annual meeting of the board of trustees. The newly elected treasurer is N. M. SYMONDS who replaces HAROLD H. ROCKWELL.

CHARLES D. DRAYTON was renamed president of the board of the Children's Hospital, Washington, D. C., at the annual meeting of the board of directors. All of the other officers were also reelected for the ensuing year.

WILLIAM A. SEELY was elected president of the Chenango Memorial Hospital, Norwich, N. Y., at the annual meeting of the board in January. Mr. Seely replaces ROBERT S. EATON, retiring head of the institution.

DR. LEE E. GRISCOM, staff surgeon, was elected president of the West Jersey Homeopathic Hospital, Camden, N. J., by the board of trustees. CHARLES W. RUSS, former president, was chosen as chairman of the board.

SIDNEY ALEXANDER was recently elected president of the board of directors of Beth Israel Hospital, Passaic, N. J.

Miscellaneous

JOHN R. MANNIX, assistant administrator of the University Hospitals, Cleveland, has been named head of the new hospital care insurance plan in Michigan, to be known as the Michigan Society for Group Hospitalization. Mr. Mannix has been active in the hospital field since 1921, first as assistant to the late FRANK E. CHAPMAN, administrator of Mount Sinai Hospital, Cleveland. In 1926 Mr. Mannix took over the superintendency of the Elyria Memorial Hospital, Elyria, Ohio, holding that position until 1930 when he took the position at the University Hospitals. For several years Mr. Mannix has been a member of the editorial board of The MODERN HOSPITAL and co-editor of the Plant Operation department.

DAVID H. MCALPIN PYLE was reelected president of the United Hospital Fund of New York at the sixtieth annual meeting of the organization. Mr. Pyle has been president of the fund since 1934.

Deaths

BYRON W. STEWART, superintendent of the Youngstown Hospital Association, Youngstown, Ohio, died January 24 of a heart attack. Mr. Stewart was president of the Ohio Hospital Association in 1924 and served as its executive secretary for several years.

HENRY F. DORAN, superintendent of the Chelmsford Street Hospital, Lowell, Mass., died February 4 following a brief illness.

100 Attend Library Institute

A three day institute for medical record librarians, sponsored by the University of Minnesota, was held at the university's Continuation Center, January 30 to February 1.

This was the first institute for medical record librarians. The university had anticipated 50 registrants, and the total registrations approximately doubled this number. Fifteen states were represented, including Texas, Oregon, Tennessee and New York. Among those who lectured were Dr. William O'Brien, Dr. Edwin P. Jordan, Dr. H. P. Jenkins, Dr. Joseph Berkson, Dr. Malcolm T. MacEachern, Dr. T. R. Ponton, Sister Mary Patricia, Lillian Erickson, Mrs. Adaline Hayden, Mrs. Jessie Harned and Mrs. Edna Huffman.

New Hospital for Buenos Aires

The Argentine Anti-Tuberculosis League, Buenos Aires, has announced the proposed construction of a hospital with accommodations for 1200 patients. The building will be 14 stories high and will be equipped with the most modern facilities for the treatment of lung diseases. A sparsely populated district within the city limits of Buenos Aires has been selected as the hospital site. It is understood that the construction contract will be awarded to an Argentine firm. A large part of the equipment, however, will be imported.

Start New Hahnemann Hospital

Ground breaking ceremonies for the new Hahnemann Hospital, San Francisco, were held February 1. Marshal Hale, president of the California Homeopathic Foundation, directed the ceremonies. The hospital, to be operated by the foundation, will occupy the site of the old Hahnemann Hospital which was razed several years ago. The first unit to be built will contain 62 beds, surgery, maternity, research, internal medicine and pediatrics departments.

Mental Committee to Move Offices

Headquarters of the Mental Hospital Survey Committee will be transferred from New York to the U. S. Public Health Service in Washington next July in order to coordinate its activities with those of the government's mental hygiene division, according to an announcement by Lawrence Kolb, assistant surgeon general.

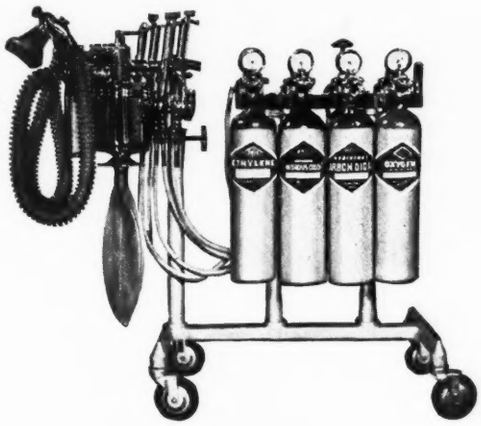
...and Sudden Realization

Suppose, as you read these pages, you were suddenly taken ill ... and a major operation was immediately necessary.

You are thoroughly familiar with the character of your equipment for the administration of anesthetics . . . you know the kinds and quality of the gases and cylinders that are on hand for immediate use.

You use them every day in administering to other people, ***but*** could *you* be wheeled into surgery, with untroubled mind—secure in the thought that *your* recovery was safe-guarded by the use of equipment and gases that have attained a position of universal preference among the profession by reason of sheer merit that can only follow years of dependable service and leadership?

Of course, your patients are not conversant with the details attendant upon the administration of anesthetics . . . they come to you in faith and confidence *believing* that you are worthy of their trust . . . *believing* that you will leave no stone unturned to assure their safety during and after the operation.



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Instilled with a keen sense of awareness to the vital importance of purity, Ohio's staff of specialized chemists maintain a constant and never-ending vigil . . . that the contents of each Ohio cylinder may be worthy of its name . . . that it may perform, only with the degree of perfection, the profound duty with which it is charged. Ohio Cylinders are in keeping with the purity and perfection of their contents . . . immaculately clean inside and out. Valves are sealed to prevent the intrusion of dirt and grease . . . and to prevent confusion with empty cylinders.

Don't Wait for a Sudden Realization

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who are discarding their present equipment for this better, more modern, more economical apparatus for administering anesthetics. MAKE ANESTHESIA SAFER for *you* and your patients. Next time you order Nitrous Oxid, Ethylene, Cyclopropane, Carbon Dioxid, or Oxygen, say "OHIO".

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LITERATURE *in* ABSTRACT

Conducted by E. M. Bluestone, M.D., and William B. Talbot, M.D.

Cancer Research

A general survey of the status of cancer research emphasizes fundamental problems which remain unsolved and which are most in need of further experimental study.* The survey was prepared by a scientific committee, appointed by the Surgeon General in connection with the activities of the National Cancer Institute Act, the purpose of which is to foster and coordinate research relating to cancer. Although intended for the consideration of all workers in the field, the recommendations of the committee concerning channels for future cancer research probably will serve as a basis for the work carried out under government auspices.

*Public Health Reports **53**:2121 (Dec. 2) 1938.

Lay *v.* Professional

During her employment as professional worker with both public and private agencies and her more recent association with an organization committed entirely to a volunteer program, the author has been able to gather some interesting details about the reaction of the volunteer to the professional social worker.* She has, however, presented the following facts from the lay, rather than the professional point of view.

A letter of inquiry was sent to 17 laymen, some of whom worked with adequate social service departments and others with poorly equipped ones. Among the people addressed were board members, committee members and volunteers.

One board member mentions the need for a fuller understanding of the professional worker's problems so that a better interpretation can be given to the lay group. A volunteer desires more adequate supervision of the type that is given the professional worker. She is anxious to become a valuable participant in the program of an agency and would like the professional worker to have more confidence in her ability to perform the work assigned to her in an efficient and intelligent manner. Another asks for an unstrained relationship between the professional and lay person. She knows she is not important enough to receive the exceptional treatment that is sometimes accorded the volunteer.

Among these responses it is also mentioned that the professional worker should endeavor to make her explanations lucid without using too many technical terms. More information should be given about communal resources and agencies with which the lay person is not acquainted. Some workers emphasize too many lurid details in order to create interest. One person stresses the need for some preliminary training and education for the prospective board member before he is actually assigned to his job.

It was found, after the National Committee on Volunteers in Social Work arranged for a questionnaire to be sent to the various schools of social work, that the curriculums included little training in the skills of working with lay groups. The inclusion of this vital subject is being considered.

*Howlett, Virginia: The Volunteer Looks at the Professional, Pub. Health Nursing, January 1939, page 10. Abstracted by Minnie Smith.

Employe Financial Reports

Many companies have begun to issue periodic financial reports to their employes as a simple method of giving them the facts about the company.* The author does not, however, recommend this as a panacea for all labor troubles.

Employe reports are worth while because of the accuracy of the information as compared with inaccurate and prejudiced information that may be received from outside sources. Employes naturally are curious about their employers and the security of their jobs, as measured by the security of their employers. Employe reports, to be effective, should include information about gross income, expenses, profit and loss and balance sheet. Simple explanations devoid of technical terms, written in words which the employe can understand, are just as important as the items themselves. Other information of a less financial nature may be as important to the employes.

Employe reports should be especially written from the standpoint of the employe; they should tell him what he wants to know, not what you think he ought to know. The report should be prepared by someone who understands the problems of the readers. Don't write down to employes. Be prepared to give the same accurate information in good years and in bad, whether it constitutes good news or bad news. Don't expect too much from an employe report. It can't and won't solve labor problems by itself. Don't drop it because employes do not seem to respond. Don't use it as a medium for company propaganda. Stick to facts. Don't talk politics. Don't try to fool your employes. Don't go in for paternalistic "company loyalty" stuff. Don't dodge unpleasant facts. If layoffs and wage cuts were important facts in the period reported on, talk about them openly.

Some imagination, some degree of originality, and a feeling for people and for people's reactions will bring success.

*Merrill, Harwood F.: This Year—An Employe Report? Forbes Mag., Jan. 1, 1939, page 13. Abstracted by Simon Tipperman.

Methods of Sterilization

Recent experiments by Hayes indicate that surgical sterilizers may be dangerously inefficient. Stress has been laid on the mode of packing and the nature of the material sterilized. This author reviews critically the usual methods of pressure-gauge control and timing of sterilization.*

In the majority of sterilizers we are dealing with a mixture of steam and air and the temperature readings are therefore inferential in the pressure-gauge type. A temperature above 240° F., with a gauge reading of 15 pounds, is possible only in a chamber with a preliminary partial vacuum of 22 inches mercury, which is more than double the capacity of the average steam-ejector mechanism. Important also is the temperature lag factor, even after the pressure-gauge recording indicates the desired pressure. Thus, thermometric control is superior to gauge control of the time factor. Various indicator devices (change of color and fusion) inserted into the drums for checkup are not always reliable or practical.

The two best systems, which provide for efficiency and the maximum degree of safety, are: (1) gravity discharge and (2) direct internal thermometer control. These systems are described and their relative merits are discussed.

*Rishworth, H. R.: Efficiency of Steam Sterilizers, Brit. Med. J., Sep. 10, 1938. Abstracted by J. Masur, M.D.

MORE LIGHT?

WYANDOTTE DETERGENT GAVE THIS ROOM 35% MORE*

*READINGS WERE TAKEN AT FOUR DIFFERENT POINTS IN THE ROOM BEFORE AND AFTER WASHING WITH WYANDOTTE DETERGENT. THE LIGHTING ENGINEER SHOWN ABOVE HAD NO CONNECTION WITH THE MAKERS OF WYANDOTTE PRODUCTS.

The walls and ceilings of this room didn't look very dirty. There was the usual gray shadow that time spreads over things—that was all. But when the walls, ceiling and light fixtures were washed with Wyandotte Detergent the delicate sight meter showed *35% more light in the room!*

•

There is no need to talk about the value of light, cheerful hospital rooms—but do you know that Wyandotte Detergent washes tile, porcelain and painted surfaces *easily* as well as *thoroughly?* That washing costs with Wyandotte are lower for at least three reasons?

Because Wyandotte Detergent is a quick-acting cleaner you save on labor costs (more than 90% of all cleaning costs are labor costs) . . . because a little goes a long way, you save on cleaning material . . . and because Wyandotte Detergent rinses freely and leaves no film behind to catch dust and dirt—walls stay light longer!

•

Ask your Wyandotte Service Representative about other uses for this superior cleaner. He will be able to help you get increased illumination at lower cleaning cost. Call him today.

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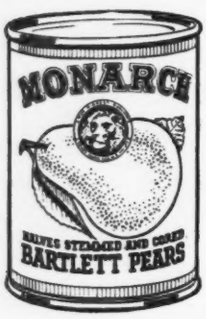
The consistent regularity with which convalescent patients with finicky appetites consume their servings of



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"Quality for 86 years"

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A selection of Dietetic fruits and vegetables is also provided under the Monarch Label.

BOOKS ON REVIEW

SO NEAR THE GODS. *Published by The Society of the New York Hospital, New York.* 1938. *Pp.* x+120. $1.

OUT OF DEEP WATERS. *1937 Annual Report of the Commissioner of Public Welfare, Westchester County, New York. Pp.* 47. *Printed at Private Expense.*

ANNUAL REPORT OF CHARLES ROSEN, PRESIDENT, TOURO INFIRMARY, NEW ORLEANS. 1938. *Pp.* 20.

ANNUAL REPORT OF METHODIST EPISCOPAL HOSPITAL, BROOKLYN, N. Y. 1937. *Pp.* 40.

REPORT OF ACTIVITIES FOR THE YEAR 1937. *Committee on Public Health Relations, The New York Academy of Medicine. Pp.* 38.

MERSEYSIDE HOSPITALS COUNCIL 1937 RECORD. *Liverpool, England. Pp.* 36.

ANNUAL REPORT TO THE BOARD OF DIRECTORS, *Fifty-Fifth Year. New York Post-Graduate Medical School and Hospital. Pp.* 139.

SIXTY-SECOND ANNUAL REPORT FREE HOSPITAL FOR WOMEN. *Brookline, Mass.* 1937. *Pp.* 35.

This collection of hospital reports illustrates many of the best and most of the worst practices in "annual reporting." The first is really not an annual report but rather an appeal for funds prepared by one of America's leading firms of fund-raising counsel. Without question, it is the finest piece of hospital promotion that it has been our privilege to receive. Prepared as a book, lavishly and intelligently illustrated, it presents the "case" for the New York Hospital in direct, simple, dignified yet moving terms. Obviously it is suited for distribution only among a select list of potentially large or influential donors.

Ruth Taylor's report as commissioner of public welfare for Westchester County could well serve as a model for any hospital or social agency that wishes to present the most important facts to its constituents without excessive expenditure. The report deals not only with Grasslands Hospital but also with the care provided to children, the aged, the blind, the needy and the prisoners in the penitentiary. Striking photographs illustrate the different sections of the report. An informal map shows the location of the various buildings in the "institution community" and several charts have been inserted to give life to the statistics. Two pages are devoted to telling "how the money was spent in 1937" and "where the money came from in 1937." No space is wasted on long and uninteresting lists.

Mr. Rosen's report for Touro Infirmary is another simple, direct and uncluttered statement. He appears to cover all the important events of the hospital year adequately and in sufficient detail for most readers. The pictures, of which there are many, are not particularly good. They seem to have been chosen to exhibit the hospital's equipment rather than to convey ideas to the reader.

The Methodist Episcopal Hospital report is apparently a compromise between the new and the old. A striking two page spread in the center of the book shows an air view of the hospital and its heavily populated surroundings. Important statistics are given in large type along one margin. Principal other evidence of newer trends is the large number of photographs. Nearly half of the total pages in the report, however, are still devoted to lists of one kind or another:

EARLY SUBSIDENCE of ARTHRITIC PAIN

A Major Advantage in Ertron Therapy

The subjective response to the treatment of arthritis with Ertron is characterized by rapid relief of pain. Occurring usually during the first or second week of therapy, this favorable reaction is apparently due to reparative changes within the joint structures. As a rule, disappearance of pain is so prompt that analgesics are not required.

Objective improvement becomes discernible in most cases early in the course of treatment. Periarticular edema and induration subside, mobility becomes less restricted, deformities lessen, and muscular tonus increases. These objective changes are frequently reflected in x-rays showing deposition of calcium in rarefied bone and absorption of exostoses. While Ertron has never been known to produce hypercalcemia, it is considered contraindicated in parathyroid adenoma, tuberculosis, pregnancy, and calculous diathesis.

Hospital Superintendents and Pharmacists are invited to send for reprints of published literature and for special price list applying to hospitals and institutions.

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How 60% of the Hospitals KEEP THEIR SURGEONS PLEASED

The Levernier Portable Foot Pedal Soap Dispensers*—Single and Twin, act with precision. They provide a sanitary technique, can be moved where desired, and are easily sterilized.
*Furnished free to quantity users of Germa-Medica

Germa-Medica and Levernier Dispensers build Goodwill and Profits too!

GERMA-MEDICA is as important to your doctors as any fine surgical instrument. For Germa-Medica too, helps improve technique. Used in the scrub up, it keeps hands in excellent condition. Thus, Germa-Medica wins the gratitude of surgeons . . . helps increase hospital income . . . builds goodwill.

Highly concentrated, the detergent lather of Germa-Medica quickly removes dead tissue and bacteria. The olive oil content soothes the skin.

To give your doctors the surgical soap they deserve, furnish Germa-Medica. No other soap provides a scrub up so satisfying and complete. Write for details now.

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AMERICA'S FINEST SURGICAL SOAP
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trustees and their committees, medical staff, former interns, nationalities of patients, lists of gifts, papers read or published by staff physicians, even down to rules for visitors. It is a significant advance over previous reports from this institution but much remains to be done.

One wonders how the committee on public health relations can cover in one year so many interesting and important subjects. They are simply described in its brief report.

Sydney Lamb's report of the Merseyside Hospital Council is, as always, a well-conceived and well-executed accounting of the council's stewardship. At the end of the year, 332,000 persons in 6362 different business establishments were contributing regularly to the penny in the pound fund. They contributed a total of nearly $1,000,000 to the hospitals of Merseyside, in spite of the fact that unemployment in Liverpool is still very high. Two photographs and several charts add to the attractiveness of the report.

The Post-Graduate report has an attractive cover, a splendid collection of dramatic photographs and catchy ink sketches. The report of Doctor Rappleye as director of the medical school makes an interesting statement of activities and research. Most of this large report, however, is devoted to detailed lists and financial statistics that are of little interest to an outsider and to excessively detailed reports from the different departments. Except for persons employed by the hospital or already very much interested in it, few readers would wade through all this material.

Free Hospital for Women also publishes a conventional and uninteresting report. The only pictures are of deceased officers. Fourteen of its 55 pages are devoted to lists. An attractive cover and one page of interesting graphs are its only claim to distinction.—ALDEN B. MILLS.

MARIHUANA—AMERICA'S NEW DRUG PROBLEM. *By Robert P. Walton. Philadelphia: J. P. Lippincott Company.* 1938. *Pp.* ix+223. $3.

Doctor Walton has gathered together all the available material on a new drug menace that is said to be the greatest problem facing narcotic officials today. "Reefer" smoking has become increasingly prevalent among adolescents, and the sociologic implications of a vice that induces criminal aggressiveness and destructive impulses are of vital public health importance. Marihuana (hashish; cannabis) has a long and dishonorable history and deserves the attention of hospital administrators who have already learned many bitter lessons in drug abuses by various members of the hospital population.—J. MASUR, M.D.

TABER'S MEDICAL DICTIONARY, *Including a Digest of Medical Subjects. By Clarence Wilbur Taber and Associates. Philadelphia: F. A. Davis Company,* 1938. *Pp.* 607. $3.

A SHORT ENCYCLOPEDIA FOR NURSES. *By Evelyn C. Pearce, S.R.N. New York: E. P. Dutton & Co.,* 1939. *Pp.* 686. $3.50.

Both of these books deserve a place in the nursing school library. Taber's is the first medical dictionary compiled by a group of specialists, each of whom has been responsible for his own field. It is more than a dictionary, a sort of source book of fundamental medical knowledge.

Miss Pearce is an English leader in nursing education. This, the third edition of her nurses' encyclopedia, includes many interesting new items. In a single volume, a reference work could hardly do more than this one.—M. W.

Colson has a place
IN EVERY HOSPITAL PLAN

Wherever you go, through practically every department of a modern hospital, you'll find Colson equipment. Operating rooms, dining rooms, kitchens, laundries, service quarters—even to those remote departments where ashes and waste are disposed of, Colson equipment of suitable type facilitates hospital operation.

Every Colson unit is built on the assumption that hospitals need and deserve the best. Doubtless, this is why Colson has been the *first* choice of so many hospitals for so many years.

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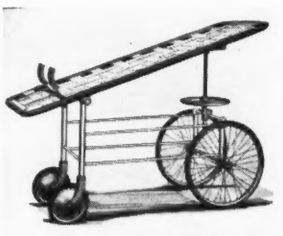
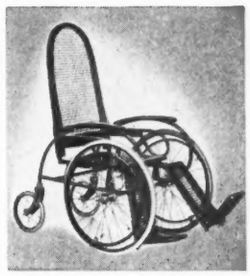
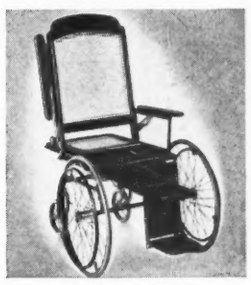


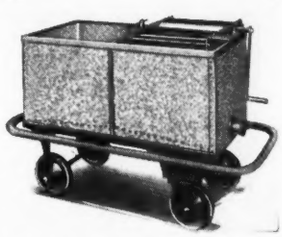
Elevating Litter Stretchers





Wheel Chairs of all types

Food Service Trucks



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Hospitals use Horlick's

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Horlick's is *dependable* malted milk because it is made to strict laboratory standards of purity and uniformity. Malted milk served by hospitals to the sick or convalescent should measure to these Horlick qualifications:

1. Well modified. Natural ingredients thoroughly processed.
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5. Milk from tuberculin tested herds.
6. Minerals and *natural* vitamins from milk, barley and wheat.
7. Not a mechanical mixture but cooked in vacuum at low temperatures.

Horlick's is made to hospital standards. Use genuine Horlick's. Leader for over fifty years.

HORLICK'S

the Original Malted Milk

RELAXATIVES

• The lament uttered below was first published in the Conning Tower of the *New York Post* for January 26. It was described by Column Conductor F.P.A. as "an ode to a hospital which inspires an odium to ditto."

FROM A GATCH BED
(As Ogden Nash Might View the Situation)

In a hospital they treat you like a king.
No one allows you to do a thing.
By merely moving a finger (which at times is a considerably more difficult job than you might think) and pressing a button
In less than twenty minutes, during which interim what happens is precisely nuttin',
A nurse appears and with a pleasant smile asks what she can do for you
And if you haven't forgotten during the interval you tell her and she does it and perhaps even thinks up something new for you.
Tall, stately doctors amble in and out of your room
And ask how you feel (as if they cared!) and you tell them and they amble out with their perpetual smile of optimistic gloom.
Beautiful attendants are always giving you a bath or stirring a pill in a glass and ordering you to drink this
Which, when you obey, not infrequently alleviates your sufferings to a point which compared with what they were seems absolute bliss.
Water pipes jangle genially, plates drop in the diet kitchen with a companionable clang
And now and then a door flies shut, usually in the dead of night, with a sociable bang.
For your entertainment nurses from time to time discuss the more gamy symptoms of other patients just outside your door.
Everything and everybody vie to make your stay enjoyable to the extent that you revise for the considerably better your previous opinion of the human race. . . .
So why is it that every minute you are there you can't think of anything except how soon you'll be able to get out of the infernal place?

BARON IRELAND

* * *

And of course, Baron, you might add
That in most places the meals are unnecessarily bad,
And that the hospital mattress
Feels like a stormy day off Cape Hattress,
And that those early morning sponge baths knock you about and make you unhappy,
Especially when merely for them they arouse you from your nappy.
I'm with you, Baron, for to stay in a hospital I wouldn't just as lief,
In brief.

* * *

Well Bred?

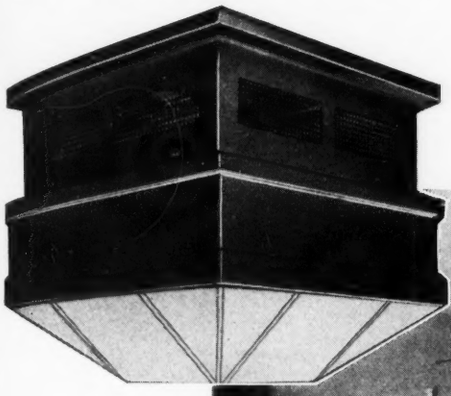
• Noted in discussion of maternity coverage at conference of hospital care insurance executives, Cleveland.

M. Haskins Coleman (Richmond): We don't seem to have so many births in the South as you gentlemen seem to be having in your parts of the country. Our ratio has remained at 10 per cent for some time. . . .

Chairman Addleman: Why, Haskins, I thought breeding was everything in the South.

HANOVIA *Presents the Latest Developments*

IN PHYSICAL THERAPY EQUIPMENT . . . MODERN, SELECTIVE, and ADVANCED EFFICIENCY . . . .



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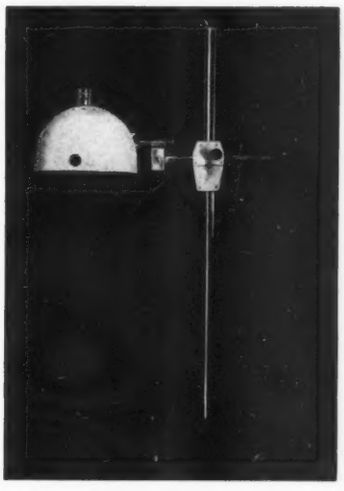
These lamps provide a powerful source of ultraviolet radiation of the special quality that scientists have shown to be germicidal in action. Hanovia Safe-T-Aire ultraviolet equipment effectively kills pathogenic micro-organisms floating in the air—relieving the dread of contamination from heretofore uncontrollable sources.
The equipment is easy to install, simple and inexpensive to operate. Full details on application.

HANOVIA ALPINE SUN GROUP SOLARIUM LAMPS

These specially designed, highly efficient Hanovia Alpine Sun Group Solarium lamps supply an intense source of therapeutic ultraviolet energy of the desired quality and of sufficient intensity within an area of 382 square feet to irradiate beneficially twenty patients at one time. These lamps cast no shadows and require no expensive ventilating equipment. They provide hospitals and other institutions with a means of administering general ultraviolet irradiation at lowest cost—because of savings in current consumption and curtailment of residence period of in-patients.

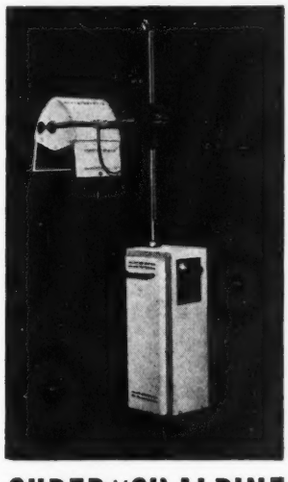


SOLLUX RADIANT HEAT LAMP

Especially designed for exceptional flexibility and therapeutic efficiency. Double shell hood well ventilated with a terraced reflector eliminating overheating and hot spots and providing an especially uniform field. Sollux localizing cones offer efficient radiation where local concentration is required.

HANOVIA ULTRA SHORT WAVE UNIT

Hanovia engineers, reinforced by a complete collaboration with leading hospitals, have produced this Ultra Short Wave Generator that pre-eminently is the most efficient and rugged in the field today, and offers the most simplified and convenient method of producing heat—deep within the tissues.



SUPER "S" ALPINE SUN LAMP

This entirely new Super "S" Alpine Sun Lamp embodies a new type of high pressure, high intensity quartz-mercury arc which has many important advantages over the conventional types of the past. It employs a self-starting quartz burner with thermionic activated solid electrodes and sufficient mercury to carry the high pressure mercury arc. Ideal for ward and clinic work.

For descriptive booklets write to

HANOVIA
CHEMICAL & MFG. CO.
Dept. 315 C
NEWARK, NEW JERSEY

M. BURNEICE LARSON, DIRECTOR

They always ask for fiery, finer, smarter people . . . . .

In all the letters that come to us our clients always ask for people who would do the work that's theirs better than it ever need be done.

. . . they come to us with jobs to fill, with *ideals* in their minds, with needs and necessities to meet, come to tell us they want physicians, graduate nurses, dietitians, every *kind* of professional help, need spirited, *plucky* people, smart and *pleasant* people, self-reliant, *honest* people, who'd *love* the jobs they would get!

We find them *for them!*

We find the finest hospital and medical people in the land; spunky, eager folks, smart and lovable . . . and never stop until we find the jobs *they* would love, *round* holes for round pegs, *square* holes for square pegs.

It has taken us *lifetimes* of learning; takes an *understanding* that is our greatest pride . . . to know the ways to find *the jobs*, to find *the finer people*, where *each* belongs to the other so obviously, so happily, that *always* they do the work that's theirs *far better than it need be done.*

How *carefully* we do our work.

If *you* want the work you'd *love* to do . . . or, if you have *that to give* and want square pegs for square holes, round pegs for round holes, want fiery, finer, *smarter* people . . . we wonder if you'll write to us . . . we'll find them for you. *That* is our great work.

Or, we will tell them who *you* are; tell them what *you* want; tell what you have to give; and how you would work! Dreams *can* come true. Will you write?

THE MEDICAL BUREAU

55 E. Washington Street
CHICAGO, ILLINOIS

IT'S SAID THAT—

Continental Car-Na-Var now puts color into floors at the same time that it fills, seals and waxes them. A color chart is available from the manufacturer, CONTINENTAL CAR-NA-VAR CORPORATION, Brazil, Ind. . . . Air conditioning equipment, for the many uses from a single room to an entire building, is presented in the new 16 page catalog just issued by CARRIER CORPORATION, Syracuse, N. Y. . . . Seven qualifications to be considered in the purchase of flush valves are discussed in the attractive booklet, "Flush Valve Facts," just published by the SLOAN VALVE COMPANY, 4300 West Lake Street, Chicago.

LINCOLN-SCHLUETER FLOOR MACHINERY COMPANY, INC., 228 West Grand Avenue, (Dept. A), Chicago, announces two new and improved sanding machines, the Speed-O-Lite and the Dustless Disc Sander, which are well adapted to institutional use. . . . . A slow self-closing measuring lavatory combination fixture has been developed by the SPEAKMAN COMPANY, Wilmington, Del., to provide an efficient, economical means of water control for lavatories. . . . The B-L-B inhalation apparatus, marketed by the Heidbrink Division of the OHIO CHEMICAL AND MANUFACTURING COMPANY, Cleveland, is designed for efficient and economical administration of oxygen and helium-oxygen mixtures.

A new "basin-bracket" dry soap dispenser, for use in the Palmolive measured soap system for washrooms, is presented by COLGATE-PALMOLIVE-PEET COMPANY, Jersey City, N. J. . . . F. E. BERRY JR. & CO., INC., Everett, Mass., offers Berry-Cel, a low priced acoustical material that is fireproof, paintproof and washable. . . . For the first time in history, the MILLER RUBBER COMPANY, Akron, Ohio, is producing a pure latex rubber tubing that is uniform in channel size and wall gauge, in continuous 50 foot lengths.

The HomOzone electric deodorizer, manufactured by the AUTOMATIC ELECTRICAL DEVICES COMPANY, Cincinnati, reduces by oxidation practically all common odors of organic origin and many of chemical origin. . . . The NEUMADE PRODUCTS CORPORATION, 427 West Forty-Second Street, New York, is offering a new film storage cabinet that assures the utmost in fireproofing and fire prevention. . . . "The Story of Irradiated Evaporated Milk," published by the IRRADIATED EVAPORATED MILK INSTITUTE, 307 North Michigan, Chicago, discusses the value of milk in the diet and the significance of vitamin D and irradiation of milk.

The Ries-Lewis Model B-E operating light just announced by the MAX WOCHER & SON CO., Cincinnati, is explosion-proof and completely adjustable. . . . Another explosion-proof item of hospital equipment is the new ether pump apparatus marketed by the Gomco Surgical Manufacturing Corp., Buffalo, N. Y.

Celebrating the one hundredth anniversary of the discovery of vulcanization by Charles Goodyear in 1839 and the fortieth anniversary of the company, representatives of the mechanical goods division of the GOODYEAR TIRE & RUBBER CO., Akron, Ohio, were guests at the Akron factories from February 20 to 23 to participate in homecoming.

"ECONOMIZE!"

ROARED THE BOARD OF TRUSTEES

"HOW?"—would be your logical reply.

Perhaps we can help. Economy does not necessarily mean cutting corners on your everyday expenses. To *really* economize, you must get at the *source* of those high expenses.

Your laundry, for instance. High maintenance costs, in this department, can frequently be traced to obsolete machinery. Out-dated equipment can eat its head off in breakdowns, repairs, inefficient, slow operation.

What to do about it? *Install modern Smith-Drum equipment!* The original cost is soon absorbed in lower operating costs—all along the line. What's more, *one* efficient, high-speed Smith-Drum unit will frequently take the place of two or more obsolete machines.

Our specially trained laundry engineers will gladly give you the benefit of their knowledge and experience. No obligation, naturally. Write to

SMITH, DRUM & COMPANY - PHILADELPHIA, PA.

Manufacturers of a Complete Line of Modern Laundry Equipment

NOTES *and* ABSTRACTS

(*Continued from page* 114)

administration of morphine sulfate (gr. ¼) 15 mg. This was then repeated when scopolamine (gr. 1 to 100) 0.75 mg. and atropine (gr. 1 to 100) 0.75 mg., respectively, were given with the morphine. The minute volume was markedly decreased with morphine alone in all the subjects, whereas the scopolamine and atropine acted as an antidote to the respiratory depression and the minute volume respiration was normal in these experiments.

Morphine and scopolamine have the disadvantage of being a "fixed-dose" anesthetic agent, but as a preanesthetic depressant we now have proof that the combination of morphine with scopolamine is safer than morphine alone.

Mapharsen

• As shown by Tatum, the Foersters and others, this half molecule of old arsphenamine possesses some definite advantages in the chemotherapy of early syphilis.

This arsenoxide is the potent breakdown product of neoarsphenamine and old arsphenamine in the body, according to the now well-substantiated theory of Voegtlin. The body cannot, however, break down the arsphenamine in an exact quantitative manner. This results in a mild intoxication with the excess nonpotent compounds of arsenic, and nitritoid reactions occur because of the colloidal nature of the arsphenamines. Mapharsen is a crystalloid and does not flocculate the blood colloids causing nitritoid reactions.

Mapharsen reduces the blood serology almost as rapidly as does old arsphenamine. It is more potent than neoarsphenamine and hence is likely to cause more violent Herxheimer's reactions. This can be avoided, however, by a small initial dose.

The usual dosage is 40 mg. for females and 60 mg. for males. Only one-half this amount is given for an initial dose. The drug must be given for the usual continuous period of forty weeks and it is best given alternately with bismuth.

Cornell and Astrachan have recently reported favorably on its use in congenital syphilis.

The drug is also effective against the Spirillum of Vincent's angina where from 40 to 60 mg. are dissolved in an ounce of water and used as a mouth wash. It is much more palatable than are the arsphenamines.

Dilaudid

• It has been shown by Seevers and his co-workers on monkeys that this ketone derivative of morphine is less habit forming than either heroin or morphine when comparable depressant daily doses are used. The analgesic power of this drug is from 7 to 10 times that of morphine but the duration of action is only about two-thirds that of morphine, that is, if the hypodermic dose of morphine will cause pain relief for four hours in a given patient, the corresponding dose of dilaudid one-seventh as large will relieve pain for two or three hours.

The order of decreasing activity on respiration and the cough reflex is as follows:

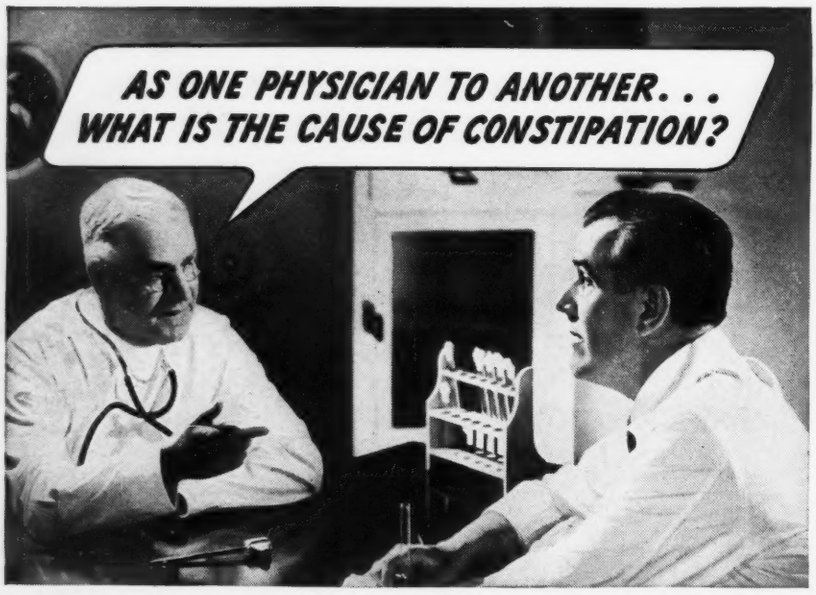
morphine > dilaudid > codeine

The order of decreasing activity in delaying a meal through the gastro-intestinal tract (constipating action) is as follows:

morphine > pantopon > dilaudid > codeine

This drug may also be used cautiously in patients who are supposedly sensitive to morphine.

The authors suggest that when long analgesia is desirable the use of a small amount of epinephrine with the opiate is sometimes effective.



OBVIOUSLY, there is no single cause. Each case must be judged on its own merits. Anatomical differences, variations in diet and habit and specific pathological entities all enter into the cause. However, it is safe to say that faulty habit plays a role in the great majority of cases, and that loss of neuro-muscular tone is a very common secondary factor.

To make habit training easier, a bland, pure mineral oil is important. To increase tonus of debilitated intestinal musculature and nervous system caused by Vitamin B-1 deficiency, pure crystalline Vitamin B-1 has been found to be of great value.

In *Vita Nujol*, these two important aids in the relief of constipation have been combined.

Vita Nujol is a smooth, pleasant-tasting emulsion of pure mineral oil with pure crystalline Vitamin B-1 added in such quantity that the suggested average dosage is the average adult maintenance dose of that important food factor (400 International Units).

Vita Nujol has a place in the treatment of the majority of constipation cases, and also in the gastro-intestinal syndromes of chronic alcoholism and many other pathological states associated with Vitamin B-1 deficiency.

Vita Nujol has been thoroughly tested and proven in laboratory and clinic.

•

A postal card will bring you free samples and descriptive literature. Stanco Inc., 1 Park Avenue, New York, New York.

VITA Nujol

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